



Pratyay

SCERT

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State Council of Educational Research & Training (WB)
25/3, Ballygunge Circular Road, Kolkata - 700 019

Pratyay

প্রত্যয়

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Pratyay

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Kanti Biswas

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DEPT. OF EDUCATION (PRIMARY, SECONDARY AND MADRASA)
Government of West Bengal (India)

Dated, Calcutta..... 200.....

MESSAGE

West Bengal State Council of Educational Research and Training has decided to publish a Journal under the name and style of "Pratyaya"

This magazine will mainly publish different types of information concerning population. I think, it is a decision of appropriate time and should be published in a programmatic manner. The theme of this magazine is of utmost importance to India. From 1950 to 2005, the world population has increased from 252 crores to 646 crores having an increase of 156%. But in case of India the population has increased from 36 crores in 1950 to 110 crores in 2005 signifying the increase of 205%. The most populous country at present is China and its population in 2005 is 132 crores which is 22 crores more than that of India. But it has been estimated by the experts that in 2035, the population of China will be 144 crores whereas the population of India will be 149 crores - 5 crores more than China.

At present, the total population of Australia is 2 crores and in India, an Australia, ie, 2 crores of people is being added every year to the population of India. Though the Malthasian theory of population does not hold good but who can deny the fact that the population should be regulated in order to maintain the standard of living of the people. In order to bring peace and harmony to the people, regulation of population in present scenario, is of utmost importance.

So I hope this magazine will go a long way to educate the people on this important subject of population.

Kanti Biswas
(Kanti Biswas)

22.8.2005

EDITORIAL

The National Population Education Project being funded by the United Nations Fund for Population Activities (UNFPA) began in West Bengal in early 1984 through SCERT and was supported by the NCERT. The Project was being implemented as an educational Project for Human Resource Development from 1984 to 2002 in West Bengal at the Secondary and Higher Secondary stages. This programme acquired significance for attainment of better quality of life through School education. During this long period several workshops and programmes were organized by the Population Education cell of the SCERT (WB).

The UNFPA funding for the project was stopped w.e.f. 31.12.2002 vide letter F.No. 5-3/02/DESSH/PEP/1230 dt. 07.10.2002. The Project was then taken up by NCERT vide F. No. 5-4/03/DESSH/PEP/2002 dated 23.01.2004 as a Centrally Sponsored Scheme titled "Quality Improvement in Schools" and being implemented through SCERT in West Bengal.

The programme implementation of Population education has been influenced by the shift in conceptualization of the theme at various international, national and state level consultations. The most notable among them is the ICPD or Cairo Convention of 1994. The governments of countries all over the world have emphasized that awareness about critical issues on population and development should be attempted replacing the earlier coercive policies. Consequently, the reconceptualised Population Education programme of NCERT has focused upon the following themes:

- Population and sustainable development
- Gender equality and equity for empowerment of women
- Adolescent Reproductive & Sexual Health (Adolescence Education)
- Family: socio-cultural factors and quality of life
- Health and education: key determinants of population change
- Population distribution, urbanization and migration.

In the state of West Bengal, Adolescence Education was viewed in a new perspective by the School Education Committee (West Bengal) formed under the chairmanship of Prof. Ranjugopal Mukherjee. The Committee took a holistic view of Adolescence Education. It entailed development of different life-skills such as self realisation, self respect, self expression, decision making and problem solving, firmness of opinion, management of emotion, management of stress, empathy and tolerance. These would help adolescents to face life more competently and would prepare them as better citizens of a country.

Following the recommendations of the Committee, the West Bengal Board of Secondary Education and West Bengal Board of Madrasah Education were asked by the State Government to consider the implementation of Life-style education in all secondary schools and Madrasahs at appropriate level and the Boards have now decided that Life-style Education will be implemented through cocurricular activities in all schools. Thus the Reconceptualized Population Education programme of which Life-style education is a component, is an emerging area in school education having multidisciplinary context.

For implementation of this Reconceptualised National Population Education Project at SCERT (WB), the School Education Department, Govt. of West Bengal, constituted a thirteen-member Advisory Board with Prof. Ranjugopal Mukherjee as its President. The Advisory Board felt it necessary that SCERT should consider publishing a journal dedicated to this emerging issue. The Board suggested the name "Pratyay" for this bilingual publication.

Publication of "Pratyay" signifies the fulfillment of a long cherished dream for a research organization like SCERT that has been involved with NPEP for over twenty years. The first issue of "Pratyay" has created a forum for discussion on various interdisciplinary issues relevant to the concept of Population Education. It comprises of two sections - the journal and SCERT newsletter.

The Journal contains write-ups on the different themes of Population Education. A brief profile of the contributors to this inaugural issue is given on a separate page. Prof. Ranjugopal Mukherjee in his write-up in Bengali has given an idea of the basic principles of Life-style Education and the premise of publication of this journal. His concept note in English outlines the framework of Life-style Education.

Dr. G. P. Datta, a renowned physician himself, has enlightened us on the ways of ensuring better 'health of women and safe motherhood'. The paper highlights the present educational, economic and socio-political status of women and the effect of different types of violence on their health. It prescribes 'optimisation of social justice' for improving health of women.

Prof. Malini Bhattacharyya in her write up has expressed concern over the degradation of the status of the girl child, the reasons thereof and the role of education in removing gender inequity prevalent in our society.

In 'Population and Sustainable Development', Prof. Ratan Khasnabis deliberates on the economic aspect of population growth. He has discussed the population scenario, limits to population growth, the Club of Rome and limits to economic growth, critique of limits to growth, concern for the carrying capacity of the earth and the theories of Malthus and Jevons.

Dr. Satyajit Ash in his article 'Drug Abuse' has concentrated on the terms used in this context, a holistic understanding of the problem, aetiology of the causes, the risk factors involved, prevention and treatment.

Smt. Mahua Chatterjee, Research Fellow (Grade-II), in her article has related women's empowerment to a nation's overall development.

The journal also contains SCERT Newsletter. It describes the various activities taken up by our organization under National Population Education Project. A glimpse of other programmes carried out at SCERT can also be obtained from this newsletter.

Lastly, it must be noted that the opinions expressed by the authors in their respective articles published in this journal are exclusively of their own. 'Pratyay' is just a conduit for carrying messages and concerns in the relevant fields. The Board of Editors, therefore, urges its readers to reflect on the articles in their own way and communicate their views to SCERT (WB). These views may be incorporated in Readers' Column in the future issues of this journal.

We hope that the contents of this journal will be found useful by everyone in some way or the other. Opinions are welcome from every quarter of life. These would enrich the Journal and help it to grow from strength to strength in future.

Dated : Kolkata, October the 4th, 2005

**Rathindranath De,
Director, SCERT (WB)**

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আমাদের প্রত্যয়

অধ্যাপক রঞ্জুগোপাল মুখোপাধ্যায়

রাজ্যশিক্ষা গবেষণা ও প্রশিক্ষণ পরিষদ (পশ্চিমবঙ্গ) সরকারের বিদ্যালয় শিক্ষা দপ্তরের একটি শাখা যার কাজের পরিচয় নামেই বিধৃত আছে। বিদ্যালয়-স্তরে পঠন-পাঠন ও সংশ্লিষ্ট অন্যান্য বিষয়ে নিয়মিত গবেষণা পরিচালনা করা, তার ভিত্তিতে উপযুক্ত কর্তৃপক্ষের কাছে সুপারিশ পাঠানো এবং প্রয়োজনীয় ক্ষেত্রে বিভিন্ন প্রকারের প্রশিক্ষণের ব্যবস্থা করা এই বিভাগের প্রধান দায়িত্ব। বিগত দুই দশককাল নানা সীমাবদ্ধতার মধ্য দিয়ে পরিষদ এই মূল্যবান ভূমিকা পালন করে আসছে কখনও দ্রুত, কখনও বা স্থিমিত গতিতে।

মাধ্যমিকস্তরে শিক্ষার স্বীকৃত লক্ষ্য হল একটি সুস্থ প্রগতিশীল সমাজের উপযুক্ত দায়িত্বসম্পর্ক মানুষ তৈরি করা। তাই শিক্ষককুলের প্রকৃত পরিচয়—তাঁরা মানুষ গড়ার কারিগর। লক্ষ্য স্থির থাকলেও গতিশীল সমাজে শিক্ষাব্যবস্থা অচল, অনড় থাকতে পারে না। সময়ের সঙ্গে সঙ্গে সমাজে নানারকম পরিবর্তন আসে। নতুন যুগে মানুষের জীবনদর্শন বদলে যায়, দেখা দেয় নতুন সংগঠনা, নতুনতর চাহিদা এবং সেই সঙ্গে নতুন কিছু সমস্যা। সমগ্র পরিপ্রেক্ষিত বিবেচনায় রেখে গভীর পর্যালোচনার মাধ্যমে শিক্ষাব্যবস্থাকে যুগোপযোগী করে তোলার দাবি ওঠে।

বর্তমান বিশ্বায়নের যুগে পরিবর্তনের ধারা অভূতপূর্ব গতি পেয়েছে। পরিচালন শাস্ত্রের একজন বিশিষ্ট তাত্ত্বিক এই ফুলকে বলেছেন 'age of discontinuity'-যখন সব কিছুই স্থায়িত্বহীন। কিন্তু বাজার শাসিত ব্যবস্থায় অনেক নতুন উপদানই সুস্থ সমাজের অনুবৃত্ত নয়। আজকের পরিবর্তনের তরঙ্গাঘাতে আদর্শ সমাজের সঙ্গে বাস্তবের ব্যবধান দুর্দল হয়ে উঠেছে। স্বর্গমণ্ডের পেছনে ছোটার অন্ধ প্রতিযোগিতা মানুষকে আঘাতকেন্দ্রিক সমাজনিষ্পত্তি করে তুলছে। সুখ-দুঃখ, সাফল্য-ব্যর্থতাকে সকলের সঙ্গে ভাগ করে নিয়ে সহযোগিতার ভিত্তিতে সমাজকে সংহত করে তোলার মানসিকতা হারিয়ে যাচ্ছে। সামাজিক দায়বদ্ধতার কথা আজ অনেকক্ষেত্রেই অর্থহীন। মূল্যবোধের অবক্ষয়ে পৃথিবীজুড়ে সুস্থ চিন্তার মানুষ আজ উদিঘ্ন, আতঙ্কিত। সমাজ বদলের সৈনিক তৈরি করার মহান লক্ষ্য থেকে সরে এসে বিভাস্ত যুগের সংজীবী চাহিদা মেটাবার দক্ষতা প্রদান করার জন্য শিক্ষাব্যবস্থার ওপর চাপ আসছে। মৌলিক শিক্ষার প্রয়োজনকে প্রায়শ আপস করতে হচ্ছে তাংক্ষণিক প্রাসঙ্গিকতার সঙ্গে। পরিস্থিতির শিকার হয়ে আমাদের কৈফিয়ৎ হচ্ছে—There Is No Alternative (TINA)—অন্য বিকল্প নেই।

এই সংকটকালে সুস্থ সমাজ গড়ার স্বার্থে জরুরী কর্তব্য হল বিদ্যালয় শিক্ষার প্রকৃত লক্ষ্য সম্পর্কে স্বচ্ছ ধারণা সঞ্চার করা, নতুন যুগের জনস্বার্থবাহী কাম্য পরিবর্তনের পথ প্রস্তুত করা এবং সেই সঙ্গে অবাঞ্ছিত প্রবণতাকে প্রতিহত করা। জটিল সময়ের ঘূর্ণাবর্তে দাঁড়িয়ে এই কাজ অতীব কঠিন, কিন্তু একান্ত অপরিহার্য। এই গুরুদায়িত্ব পালনের জন্য প্রয়োজন তথ্যভিত্তিক তত্ত্বসমূহ গবেষণা চালিয়ে যাওয়া, শিক্ষাব্যবস্থার সঙ্গে যুক্ত সব অংশের মানুষকে সমসাময়িক বিষয়গুলি সম্পর্কে অবহিত রাখা এবং নীতি প্রণয়নে সাহায্য করা। সমাজটাকে জানার, যুগটাকে চেনার উদ্দেশ্যে প্রাঞ্জমহলে নিরসন গবেষণা চলছে। সেই জ্ঞানচর্চার প্রাসঙ্গিক ফলাফলের সঙ্গে পরিচিত থাকতে পারলে আমাদের চিন্তা স্বচ্ছতর হবে, বিবেচনা সম্মত হবে। সেই বিচারে সমাজ বিজ্ঞানের বিভিন্ন শাখায় যে চিন্তাবিদরা উচ্চমানের গবেষণায় নিরত আছেন তাঁদের কাছ থেকে মূল্যবান প্রবন্ধ সংগ্রহ করে এই পত্রিকা প্রকাশের আয়োজন। যে গবেষকদের কাছে আমরা লেখার জন্য অনুরোধ জানিয়েছি তাঁরা সকলেই অকৃত্তাবে সাড়া দিয়েছেন। আমরা কৃতজ্ঞ। এই বৌদ্ধিক সম্পদ আমাদের আমাদের আঘাতবিশ্বাস বাড়িয়ে তুলবে। আগামী দিনে পরিষদের গবেষণার যাথার্থ্য ও প্রাসঙ্গিকতা সম্পর্কে আমাদের সংশয় ও বিভাস্তি দূর করবে, দ্রুত পরিবর্তনশীল জগতে শিক্ষাসংক্রান্ত অনুসন্ধান ও সুপারিশ করার পথে আমরা প্রত্যয়দৃষ্টি পদক্ষেপে অগ্রসর হতে পারব।

আজ 'প্রত্যয়'-এর প্রত্যয়লগ্নে আমরা সংশ্লিষ্ট সকলের শুভেচ্ছা ও সহযোগিতা প্রার্থনা করছি।

CONCEPT NOTE ON “LIFE – STYLE EDUCATION”

Prof. Ranjugopal Mukerjee,
President, Advisory Board on NPEP at SCERT (WB)

The Background :

A human child grows up naturally like any other living creature. The development depends upon the child's environment. Its nourishment, the socio-educational standard of its family, the nature of its social sphere etc. act as regulatory factors. Every child develops through this system. Then coming of age at a special time gathers a new dimension. The boys and girls grow up in a special way. Their life experiences successive turns. This process of change from early youth to maturity takes place over a few years. This phase in Life is called 'adolescence'. Although there exists difference of opinion regarding the time-span of this important stage of life, generally, nowadays 10-19 years of age is regarded as adolescence. Some important changes occur in the physique of adolescent boys and girls during this period. Adult persons, specially teaching professionals are fully aware of these characteristics relating to the attainment of youth. So, a detailed description and discussion is redundant. These biological changes give birth to some psychological reaction about which either we remain unaware or do seldom care.

These unknown and unexpected changes befall them as mystery. They fail to realize that this is a natural stage in the development of all human beings. Lack of prior knowledge generates a feeling of uncertainty and even of an unfounded consciousness of guilt. But they have no way to know the real thing. A frank discussion regarding private organs creates embarrassment among parents and other elders' circle. Boys and girls also feel ashamed to enquire about this. They become rudderless with this repressed curiosity, their minds become unsettled, worn out and morbid. In this position they search for other avenues of information. They start to talk among peer groups who are also equally ignorant. They become victims of delusion caused by wrong information and unscientific explanation.

This unsettled condition has a far-reaching harmful impact on the life building process. To solve this problem the concept of sex education in school level took shape long ago and was introduced in several countries. The syllabi were more or less limited to the development of sex organs, reproduction and reproductive health. But later experts realised that mere physiological knowledge cannot answer all the queries of the adolescents. Besides the anxiety caused by the mysteries of physical changes, the mental world of the adolescents undergoes other changes that impair their social well-being in later life. New developments appear in their desires and expectations. Their craving for affection, love, company, care and support becomes increasingly intense. This initiates mental gap with the parental sphere but opens new vistas of company and attraction for the peer groups. The loneliness of modern nuclear family heightens their agony and anguish. They naturally tend to be very sensitive. They want recognition as adults and at the same time can feel neglected or unwanted for trifling reasons. Adjustment with the family and other institutions poses new challenge to their daily existence. In this period of attainment of youth, the attitude of the adolescent girls and boys towards their respective opposite sexes start to change. They start to develop a feeling of sexuality and sex-desire.

But basically, these are not problems. They are the signposts of growing up. If we can properly perceive and understand these changes, their desires, queries and anxieties and channelise them in the right direction, the young men and women would then be capable of developing the desired personality which would help them to lead a healthy and creative life. But any failure in this management will create a variety

of problems for the individual and for the society as a whole.

Therefore, the need for incorporating in school curriculum the mental and social aspects of attaining adulthood with the same importance as its physiological characteristics, is now recognised. Through deliberations at International and National fora “adolescence education” has emerged as a more acceptable concept than “sex education”. The main aim of this education is to build in the children of this age group a healthy attitude that will help them to lead a creative familial and social life. These relevant abilities are termed as “life-skills” and the institutional arrangement that combines these is called “life skills education.”

The question of including sex-related education in school curriculum was raised in our country long ago. There have been prolonged discussions and debates, but always with negative conclusions. In 1993, such a course was recommended for the first time on an all India basis without sufficient initiative for its implementation. NCERT took a clear decision that year for starting this course. But when it recommended the Framework of National Curriculum in November, 2000, it did not suggest such a programme. The Council only mentioned in the list of attitudes and abilities to be generated and promoted through curriculum, the point of “cultivating proper understanding of and attitude toward healthy sex related issues and respectful attitude toward members of the opposite sex.”

Our established mind set considers sexual relation between men and women as an entirely personal affair. The age old value system of our society is never in consonance with unbridled and unrestricted sexual relations. Pre-marital or extra-marital sexual acts and deeds are looked down upon as immoral and cause of a thoroughly depraved society. There is a sublime privacy in the relation between husband and wife, which we hold in high esteem. For that reason we feel hesitant to publicly discuss about sex. Naturally, male – female sex organs fall into that area of secrecy. If these topics are included in the curriculum and syllabi, then we have to write reading materials for them to teach in the class rooms and we have to set questions in examinations- all of which are incompatible with our adorable mindset and culture. Hence our uneasiness in conducting such an educational programme is quite normal.

The Present Urge:

But society is not static; it undergoes metamorphosis through the dialectics of action and reaction between new and old. New situations are posing new problems and also offering new possibilities, inspiring various demands, slackening age-old value system, ultimately reshaping the canons of the society. We are forced to shake off some long-standing ideas, thoughts and habits.

The process of establishing women folk in their rightful place in the society by breaking the shackles of feudal norms has been initiated. Endeavour is on to expand their role in all social and economic walks of life. Consequently, the social intercourse and friendship among adolescent boys and girls, among young men and women are becoming much easier and natural than ever before. The conservative attitude and the superfluous and meaningless taboos are receding. This is obviously a healthy sign of social progress. But by taking undue advantage of this much needed transparency and freedom an impetuous, unrestrained, unbridled behaviour and life style is being provoked, primarily with an eye on business interests. An atmosphere of open and unhindered sex enjoyment without any social discipline and code of conduct is being created in a planned manner. The wave of rootless culture that is engulfing us and seeking to direct our philosophy of life in the wake of Globalisation is adding enormous fuel to this degradation. A powerful block of the mass media is spreading this unhealthy trend in towns and villages through the length and breadth of this country. The essential message of this colourful day dream is that – the gratification of life

rests with promiscuous and unrestrained sexual escapades. The most intimate pleasure of human life is being projected as a market commodity. The women's liberation movement is being waylaid deliberately.

At a time when our youth are victims of profound despair and confusion under the intense stress and strain of the prevailing socio-economic situation, such dazzling and alluring propaganda is leading them astray and rousing in them unhealthy curiosity and desire for foul experiments. The familial ties and social relationships are facing a big question mark. Promiscuity is raising its ugly head. An important and respectable section of the society is pleading for this waywardness in the name of individualism and trying to discard all the societal norms. This restive environment charged with excitement is giving birth to various types of individual and social hazards. We are panic-stricken by the rapid spread of fatal drug addiction, incidents of unwanted pregnancy and above all, of AIDS. Now-a-days people in large number are inclined to shake off their conventional ideas and habits. They have come to realise that it is futile to try to conceal the messages that are being transmitted through filthy routes. So society's antipathy or resistance towards scientific sex-related education is gradually on the wane. This idea is gaining importance as a part of general perception of health.

Reservation Nevertheless:

It is true that there are some stirrings in the age old attitudes. Still there exist some doubts among guardians and teachers in this matter. These have been reflected in a very well written article by Shri Jiban kumar Mukhopadhyay published in the "Parshad Barta," the mouth piece of West Bengal Board of Secondary Education, of December 2003.

The salient features of this line of thinking are :

- (a) The real motive behind introducing sex-education in School curriculum is to compromise with social depravity and shift the burden to young boys and girls. This proposal reflects the opportunist tendency of the adults. It seems as if they are telling their wards, "See, this is the situation. Now you manage it yourself."
- (b) The conspiracy to disrupt the social code of conduct about genital organs has become very strong in the present commercialised social system. In reality the adolescents are first bewildered by taking advantage of their lack of relevant experience. Then sex education is taken up as an attempt to set their minds at peace, by some States dominated by business interests.
- (c) The ultimate aim of this education is to quench the curiosity of the young adults and to make them aware of certain facts so as to enable them to be cautious about undesirable consequences. But there is an apprehension that in effect it might be counter productive. This education has the potentiality to become a subject of distraction and spicy thought among the boys and girls.
- (d) Inclusion of a new subject will increase the curricular load. And again the exciting topics of this heavy syllabus can agitate or perturb the delicate mind of the young students in the prime of their youth.
- (e) Sex education in school is not an effective measure for getting rid of sexually transmitted diseases. Much more desirable is developing a social ethos with built-in stricture or censure on pre-marital / extra marital sex so that the school students can shape and mould their values in this area along with their general value system in life.
- (f) The family is the most effective training ground for human sex life. Due to various reasons that institution is disintegrating. But taking shelter under school curriculum as an alternative may produce the evil results of premature haste.

(g) The adolescents can learn everything about the marked changes of their body and mind without any inhibition from their parents. For this the need is not to educate the boys and girls but their parents, so that they can act as a light house for their wards.

The observations arrayed above obviously deserve close attention because they reflect the beliefs and attitude of many well meaning people. With due respect to these arguments the relevant consideration in support of the proposed programme are laid out below :

- i. No one disputes that the derangement of the society and the State and the resulting decadence of culture and value system is the main problem. The obvious reason of this degradation is market-dominated society, which in effect is bringing down our cherished human values and nourished social discipline, and is endangering civilization itself. Symptoms of this malady are becoming palpable in every field of social life. The youth are being misled in a planned manner. In this situation almost everybody has become vocal about the need to change the society. Even N.C.E.R.T., the Central Advisory organisation of School Education, in its National Curriculum Framework published in November, 2000, clearly stated, regarding the general aims of education that "It (education) must also lead to a non-violent and non-exploitative social system" (Para 2.5, P.39).

But the change of society cannot be brought about overnight. That is a long drawn and hard struggle. Even the necessary diffusion of consciousness in this regard has not yet made much progress. But at this moment we cannot turn a blind eye to the devastating effect of this degeneration. Had the social environment remained uncorrupted, if it were that the delicate minds would not be besmeared with dissimulating crooked filth, there would be no need for the education system to take up this challenge. Alas! The situation is far from this. Quarters of vested interest are filling the air with venom. An indifferent and inactive education system would be held responsible for the inversion of the coming generation. Moreover, appropriate education is necessary to rein in the basic instincts, changes in the society notwithstanding.

- ii. The new programme which West Bengal Board of Secondary Education is going to launch in consonance with the recommendation from State School Education Committee (2001-02) is not merely sex education. But it is an integral part of demand-driven, comprehensive awareness of physical, social and mental health. No new subject will be added except some new topics in the Life Science syllabus. The major chunk of this praxis would be through co-curricular activities. The main aim of this education is to create healthy cultural atmosphere by developing socially conscious personality enriched in values. In fact this proposal embodies an effort to integrate the essence of different aspects of basic education and some specific life skill with social values. It has not yet been possible to give the concept a clear shape and place it before the people. Hence the scope for misconception about the aim, features and pervasion of the subject.
- iii. We are all anxious about the spread of the HIV – AIDS pandemic. There is no denying of this bitter reality. At present, the tendency to alienate this disease from the rest is leading to a crisis. This is hampering the smooth disposal of health services. Many opportunistic persons and organizations are spreading terror for their business interests. For this reason, education regarding the mystery of procreation is necessary today along with genuine health awareness. Some sections of the society have taken prevention of Sexually Transmitted Diseases as the main aim of

adolescence education and are propagating this idea with the tacit message that, "Do whatever you like, self-control or restraint have no place. Just learn how to avoid the disease." Definitely, we are not going to toe that line of thought. That our programme has a healthy, holistic objective in view has already been mentioned.

iv. It is a common experience that for variety of reasons, the family- school is dwindling. The economic forces have compelled us to adopt the small family norm. Yet it cannot be denied that this has given birth to some malaise. Family in most cases now comprises only parents who cannot provide ample company to their adolescent child nor can they fully share their ideas, curiosity, passions and emotions. In majority of cases, they simply cannot realize what their ward actually needs and wants. Parents from the less privileged section of the society lack even perception in this matter. They also need to be educated. But in this country of billions of adult illiterates how when and by whom would that education be attained? Would it be achieved at all? Despite apprehension of some side effects, the planned introduction of the programme in schools seems to be the only alternative. The school students of today on attaining parenthood in the coming days would be able to fulfill the needs of the family school.

The Skills And Their Necessity

On the basis of the main idea of Life Style Education, this programme has been framed in the under mentioned groups :

1. **PHYSIOLOGICAL** – To enlighten and to provide the students necessary information and scientific explanation regarding the reproductive organs, their functions, the stages of development and hygienic care as a part of physiology in general.
2. **MENTAL** – Information and explanation regarding the above mentioned subjects should be presented in such a manner that the young adults remain free from tension generated by ignorance, misinformation and repressed curiosity.
3. **SOCIAL** – The students should be made aware of the established norms of behaviour in the society so that they can develop healthy relationship with the members of the family and with the community at large. Due importance should be given to the relation between the wards and affectionate parents, between the teacher and the taught. In consonance with the development of proper relationship among the peer groups, respect for the opposite sex also needs to be developed. Not merely the idea, but conviction on gender equity should also be properly groomed.
4. **CULTURAL** – The students should be made interested in quality arts and crafts, Literature and other branches of cultural activity for the better understanding of society and to nourish the spirit of collective living. A proper channelisation of their creativity is very much sought after in this regard. The relish of culture and active participation in it will enable the students to become sensitive towards other human beings and also will help them build up humane relationships. The role ~~and continuation~~ of cultivation of culture in developing a total value system in life is undeniable.

5. ETHICAL – Life-Style Education in its totality would raise moral standards of the students by strengthening their social and mental health. As a result, they will acquire the habit to move along the path of life collectively with other members of the society. They will eventually learn to place collective interest above the narrowly perceived personal ones. They will also be able to respect the code of conduct accepted for the progress of the society, and on the other hand they will be able to garner the strength for struggle against the consumptive elements of the society.

The Concept of Life Skills

The significant period of adolescence is not only marked by physical growth of boys and girls, but it is also the best time for shaping their ideas and thought processes, emotions and values. Development of skills is a lifelong process that helps men and women to grow and mature and to remain faithful to their convictions. Some skills develop naturally and spontaneously, some through interaction with the environment and some by way of teaching, exercise and habit formation. School Education has a special role to play in circulating these skills among individuals. The ability to complete a work properly is called skill. Different types of skills are talked about during relevant discussions in different areas. But the skills that are expected to be possessed by a mature person may be generally divided into two categories –

(a) Productive Skill

This signifies producing a commodity or service or effective participating in the process of production through well-coordinated application of physical, intellectual and mental abilities. The products will include commodities and services to be consumed directly, along with the creations having aesthetic values.

(b) Social and Personal Skills

We have to understand the difference between personal quality and personal skill. Sense of value is the realisation of those attitudes and behaviour of men and women as social beings which would be conducive to the society's welfare. It is the idea and belief relating to highly valued behaviour. Human character will be enriched in morality if they can understand the norms and principles accepted by society that are essential for forming a healthy society, and imbibe those in their hearts. When these inherent human qualities are reflected in a person's behaviour, they are acknowledged as skills. Realisation of 'what to do' is a quality of character. Comprehending 'how to do' and applying this quality in real life situations is skill. We are aware of many human qualities like honesty, love for mankind, freedom from prejudices, sensitivity, unselfishness, etc. and do not have any doubt about their values. Yet very often our behaviour does not conform to this belief and we are found lacking in skills. So acquisition of skills too is a matter of exercise just like acquisition of knowledge and understanding.

One of the main aims of Life-style Education is to infuse some such special behavioural qualities in the characters of students of the relevant age group, the integration of which would help develop in them a healthy and complete creative personality fit for leading a familial and social life. These are the qualities which have been named life skills. These assets of human character have to be differentiated from efficiency or skill in doing a job. The immense potentials that are woven into the restless mental condition of the adolescents have to be diverted in the right direction. Then only it is possible to build a character suitable for the society. A brief idea of the skills that are generally discussed in this context is given below.

1. Self –realization

A host of doubts, queries and desires centering themselves arise in the minds of the adolescents. If the individual can master the art of finding answers to questions like 'who am I', 'what do I want', 'what do I want to be', 'what do I want to do for that', 'wherein lies my strength', 'what are my weaknesses' then he/she can lead a somewhat peaceful and burden free life with a fixed goal in front of them. Of course, it is not possible to get rid of worries completely. The present social condition poses the main hindrance to that.

2. Self – respect

The students should learn to evaluate themselves realistically along with the process of knowing themselves. This will help them to understand their place in the society. They will realize their dignity by avoiding the two extreme attitudes of vanity and inferiority. If they can do this, they will be able to develop an attitude befitting that dignity. The resolve of not letting oneself down in the eyes of others by giving in to wrong temptations or propensities, will enrich their persona.

3. Self – expression

Adolescence moves on taking along with it many dreams, hopes, disappointments, questions, curiosity etc. Adolescents are disturbed by the turbulent desire to share their feelings with others and to express their joys or pent-up agonies. They are troubled by questions like 'who will listen to me', 'who will understand me' etc. Thus transmitting one's thoughts to the right person in the right way and at the right moment, is a valuable skill. This skill reduces the mental stress of adolescents and also helps in enhancing their confidence and creativity.

Baring one's heart will of course not be a one-way process. It will be two-way or multi-pronged, depending on the situation. The person who wishes to share his/her feelings with some one else, must observe and understand the reaction of the listener. Simultaneously, he must also develop the attitude of listening to others, understanding their feelings and expressing a healthy reaction. A bridge of mutual understanding may be built between two or more persons through this process of sharing and listening. The skill of self-expression then attains a new dimension and matures into a complete 'communicative skill'. The communication may be conversation between two persons or discussion among many people. There might be differences of opinion between two or more persons. It is possible to resolve the differences and to solve the problems through friendly discussions. Differences do not break relations. This refines the thought process of the youth and their position in the society becomes fortified. Communicative skill is an essential component of the process of real socialisation of a person.

We must however, put in a note of caution over here. The three above mentioned skills centre around the individual. If the concepts are not clear they might give rise to selfishness, a deep malaise our intensely competitive society of today is suffering from. Exercise of all the three skills has to be placed in the larger perspective of society and the world. A good citizen will not only know his/her hopes and demands but also be aware and conscious of what the society expects of him/her. Consciousness about one's rights and dignity has to be cultivated. Side by side, one must be prepared to discharge one's responsibilities necessary for earning them.

4. Decision making and problem solving:

Every person from his/her very childhood takes decisions every now and then on various issues with the help of his/her judgement. A boy or girl is taking some decision or the other all the time while going through his/her daily routine, like participating in games and sports, performing household chores, obeying elders, doing something secretly, etc. In some way or the other, he/she is taking decisions and solving various problems according to his/her intelligence. In each case the correctness of the decision depends mainly on the analysing power of the concerned person. There is however, a scientific process of decision making whose principal steps are :

- a) To identify the problem properly – We often consider one or two symptoms as the problem and cannot comprehend the problem itself. If this happens, the correct solution eludes us. Therefore, identifying the problem correctly by delving deep into the indications is the first step.
- b) Complete analysis of the problem – It is necessary to analyse the problem completely after its identification. The true nature of a problem is revealed when it is judged in various perspectives e.g. its origin, its primary and subsidiary causes, long - term and short-term effects etc.
- c) Searching for alternative solutions – Almost all problems have varied solutions. Usually we tend to adopt the easy solution lying close at hand without much thinking. This may not lead us to the best solution. Therefore, we have to search for all the possible solutions to a particular problem, depending on its nature.
- d) Evaluation of the alternative solutions - All the solutions have to be judged in the context of desirability and feasibility.
- e) Selection of the best solution - If we can select the most desirable of the solutions from the comparative picture the process of decision-making will come to a successful end.

In reality, however, it is not always possible to follow the theoretical process at the time of taking a decision. But if we are acquainted with the process and apply it consciously, it becomes a part of our thought process. Then in most of the cases our decisions will be much more orderly and effective, even if we do not adopt the process consciously.

This skill has special relevance during adolescence. A little reflection would show that people of all ages take numerous decisions during their lifetime. Some decisions are right, some are wrong but mostly they are only partially correct. A question may arise that why is this skill being mentioned specially in the context of Adolescence Education. The necessity of this skill can be judged from two angles. First, adolescents face different types of complicated problems in their daily life. Some problems are considered to be exclusively private by them. They hesitate to talk to their parents about everything like small children. They feel the urge to take decisions on their own according to the situation and to solve their problems by themselves. On the other hand, the ability to understand different issues logically grows in the adolescents. A linkage occurs between necessity and capability. Thus the skill of decision-making helps in maturing the personality of the adolescents.

5. Firmness of Opinion:

It often happens that teenagers are able to decide what they should do and what they should not, but they cannot state their opinion firmly and without hesitation. Suppose a teenage boy is being incited by his friend to start smoking or to do something undesirable. Although he may express his unwillingness at first, in most of the cases out of weakness for the friend or just to maintain the relationship, he cannot remain firm in his decision. This becomes the beginning of going astray against one's own wishes. Therefore it is especially necessary to cultivate the habit of stating one's view clearly without of course being unnecessarily rude.

It is essential to be cautious about this matter too. One who learns to express one's views with conviction, will also remain firm to his unjust demands. Therefore, the pre-condition to the application of this skill is to develop a clear idea about the right and the wrong, the desirable and the undesirable.

6. Management of Emotions:

Emotion is a valuable asset in human life—personal, familial and social. Sacred emotions are the very bases of leading a healthy collective social life, sharing others' joy and sorrow with an attitude of co-operation and also love for mankind. Men and women will become machines if they are devoid of emotions. But surge of uncontrolled emotions sometimes engulfs a person's judgement. At that time he/she fails to take the right step in his / her life and is led astray. Therefore the skill of confining emotions within proper limits is very important.

7. Management of stress:

Adolescents naturally face different types of mental stress. Their dreams are unlimited, but most of them are crushed by harsh reality. Many desires in life remain unfulfilled. Failures of varying magnitudes occur in their daily life and this fact troubles them. The present complicated socio-economic situation is becoming more and more unfavourable for a large section of our future citizens. The uncertainty of livelihood is shattering their self-confidence. They are feeling helpless as they are being deprived of the ordinary opportunities of leading a healthy life. They develop a sense of worthlessness in the society or in their family. This is weakening their self-esteem. On the other hand, a handful of youth is leading a luxurious and wanton life. All the elements of earthly pleasure and luxury are easily available to them. The society's interests are not of any concern to this self-centered section. The 'have-nots' lose their faith in society on seeing this disparity. They cannot find a way out for redress. This unusual stress is becoming more intense day by day on the young mind.

The teenagers lose direction if they cannot effectively tackle this imposed stress. With a broken heart they fall victims to mental depression. They are engulfed by various self-destructive tendencies. Drug addiction, sexual aberration, violent protests—these are the results of this weakness. Therefore the adolescents have to realise the adversity of the situation, to understand its causes with a logical frame of mind and also to gather the mental strength of not escaping from the struggle for collective existence. On

the other hand, youngsters of affluent families leading a cocooned life should also learn that self-centered lifestyle takes them far away from real human existence. This section of the youth is under a different kind of stress – their aspirations touch the sky and no amount of splendour can satiate their limitless demands. So their despair too touches the nadir.

Citizens of all strata make our society; boys and girls of all sections are our target group. It is essential for them to attain the skill to face stress in an unfaltering manner. They will acquire this skill from their life; and education is one of the pillars in shaping a person's life.

8. Empathy:

It is primarily an abstract idea used in the realm of art and literature. In general it means to bring one's emotions and feelings to a level at par with those of another, and to react accordingly. If someone gets angry, others may irk him more by mocking or aping him. Or else they may put themselves in the position of the first person and act positively towards him / her by understanding the reason of his ire. This behaviour is by and large spontaneous. But if practised consciously, this reaction can always be made significant and well-meaning. In that case it will become an integral part of one's nature to blend one's feelings with the sorrow of another instead of remaining nonchalant towards other peoples' woes, or taunting them. This skill helps teenagers to move forward towards socialisation. It also enables one to maintain rapport with others.

9. Tolerance:

Tolerance is a basic quality in all human beings. But this has to be considered separately as a life-skill during adolescence, because a tendency of intolerance is generally observed among adolescents, which emanates from self-consciousness. When they will pay attention to self-respect and firmness of opinions, the tendency to establish oneself without paying heed to anyone older or younger will also grow. They will face problems in maintaining social relationships if they cannot get rid of this tendency.

SIGNIFICANCE OF THE NAME LIFE-STYLE EDUCATION

The term 'Life skill' is generally applied to Adolescence Education. The title 'Life Style' is, therefore a novelty. This name 'Life-style' was adopted on the recommendation of West Bengal School Education Committee (2001-03). The rationale of this should be clear. The adolescence of our country confronts diverse economic, social and cultural environment while growing up. Consequently, they do not get equal opportunity for imbibing the various skills of life. Naturally, the ability to master these skills differs from individual to individual. Some can assert their opinion firmly but lack empathy. Others may exalt in self-esteem but cannot take firm decisions at all. Combination of various life skills acquired in different degrees gives a direction to individual's living pattern. The aim of education of all students would be to develop life-skills to an optimum level – which will converge into an ideal Life Style. But in reality, diversity and uniqueness of individuals' life-style is unavoidable. The skills have to be acquired whose essence would be life itself.

PROGRAMMES FOR LIFE STYLE EDUCATION :

The curriculum framers believe that addition of further load will be detrimental to the students. So, we propose not to introduce any new subject in the curriculum. From what has been discussed before, it is understood that Life Style Education will primarily centre around value-inculcation and character-building. The national consensus is to infuse the coveted values across the curriculum and also through effective co-curricular activities. In case of Life Style, only some portion of physiology will be added to the Life Science syllabus. Effort will be made to introduce the remaining major portion through different well-planned co-curricular activities. It will not be possible to follow a single programme effectively in all types of situation. Appropriate programmes will have to be innovated and used keeping in mind regional speciality, need and feasibility.

The fact that all children do not face the same challenge in enriching themselves in life-skills merits reiteration. Students coming from well-to-do, aristocratic, enlightened families have different kinds of problems, dreams, scopes and opportunities compared to those of the first generation learners coming from economically backward families. Preference or bias for the male child over the girl child has percolated deep down into the society. Therefore, acquisition of skills like self-esteem has become much more difficult for the girls. It is, therefore imperative that we adopt different strategies to bring equality among students of both the genders at all levels, taking care that the most deprived section gets the maximum attention.

Deliberations at International and National levels lay special emphasis on the concept Adolescence Reproductive and Sexual Health (ARSH). We think that the above cannot be the pivotal point of a separate skill. The word ARSH indicates a special aspect of health. The physical part of it can be addressed by incorporating topics of Reproductive system in the Life Science syllabus. The skills mentioned earlier will cater to the development of mental and social health of the adolescents. The skill that needs to be shaped in this context, relates to the establishment of a healthy sexual relationship between two individuals. Generally, the adolescents are unable to take correct decisions in situations related to sexual relation. In this situation, it is essential to provide them with requisite skills so that they can take steps in the right direction. The adolescent by acquiring Life skills and Life Styles already described would be able to develop such personality so that they can face any personal, familial and social problems. Naturally they would not falter or back out while confronting issues of sexual relation.

Methods for Developing Life Skills

Nine different Life skills have already been discussed in the previous section. To develop such skills we have to a certain extent take direct resort to our curriculum. However, majority of the above mentioned skills are associated with general, human and social values. Our school education aims to provide value-based education through all subjects of the curriculum. It is accepted in academic circles that all subjects are value-subjects and all teachers are value teachers. But due to various reasons, it is not possible to inculcate such values only through curriculum. So as a complementary measure, they have to be inducted through co-curricular activities in schools.

All the subjects included in the curriculum play some role in shaping the character of an adolescent. Learning Mathematics, for instance, helps the adolescent to think logically and coherently. But study of literature has the greatest potential for effective infusion of values.

Presently, Life Science syllabus includes study of several systems in the human body (for example, Digestive System, Circulatory System, Respiratory System etc.). Reproductive System with reference only to other animals like frog is being taught. These portions of Physiology are fact-oriented and explanation based. Here, knowledge and comprehension are more important. Therefore, to meet the challenges of the age, it is proposed to include the relevant facts and explanations of human Reproductive system. The Life Style program has obviously to cover several aspects of general health education. Though in our state, school curricula from the Primary stage have provision for imparting health education in a scientific way, yet the same should be modified in Life Science syllabus, if any major gap is found. Effort should be made to create possible scope for developing specific values and skills through the transaction of the Life Science syllabus.

It is also necessary to appreciate the importance of well-planned co-curricular activities keeping in mind the peculiar situations faced by the students at their transitory stage to adulthood. Following are examples of the many co-curricular activities that may be taken up in schools – Question Box, Drama / Role Play, Group Discussions, Debate, Case study, Drawing / Poster Competition, Quiz Competition, Essay competition, etc. All these activities need not be confined to sex-related issues alone. Broadly speaking, the purpose would be to create awareness amongst the adolescents regarding the problems and possibilities of the present society to enhance their level of consciousness, and also to inspire them to have a healthy, perceptive and analytical mind. Topics for Debate can therefore relate to Human Rights, Erosion of values, Dignity of Women, Market-controlled Society etc. Issues like Eradication of Illiteracy, Evils of Dowry system, Conservation of Environment etc. may be presented through drawings, posters, etc. Apart from these, the teachers can themselves introduce other local specific topics applying their own judgment.

In reality, it is not always possible for the schools to provide all the opportunities to enable a student to become a good citizen of the country. In this context, Mudaliar Commission in 1952 recommended linking of schools with various Social organizations engaged in conducting physical and other cultural activities. School Education Committee of W.B. (2001-2003) reiterated this recommendation and mentioned names of a few such organizations working in this state to be given accreditation for their activities and certification. These are Monimala, Sab Peyechhir Aasar, Bratachari Samiti, Scouts and Guides, Kishore Bahini, Jatiya Krira o Shakti Sangha etc. Recognition of these organizations will help remove to a large extent, limitations of the schools in conducting co-curricular activities. More often than not, the educational camps of these organizations show high level of discipline and social consciousness. The adolescents get valuable training from these camps about how to lead collective life in a harmonious manner.

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HEALTH OF WOMEN AND SAFE MOTHERHOOD

DR. G. P. DUTTA

Preamble

The most important aspect of healthcare in any country mainly depends upon the health situation of its female population. In a gender discriminating society, health of women depends upon optimisation of social justice to the weaker, superlatively adored as fair, sex.

Bhore Committee (1946) defined health as a condition of physical, mental and social well being and not merely absence of disease. This was accepted and proclaimed by World Health Organisation in 1948 and reiterated in '**Alma Ata Declaration - Health for All**' in 2000 AD. WHO was convinced that this is achievable if health care is implemented through primary healthcare as defined in Alma Ata Declaration, taking healthcare delivery beyond the four walls of treatment centres. The Declaration emphasised on the need of fulfilment of basic needs of life.

Women remain in the central position of our family and community life. In ancient time, women were eulogised as "*Adhara Swarupa Jagatastamika, Mahi Swarupene Yato Sthitasi. Apang swarupa sthidayataita dapiyayate krishna ananta bilyea.*"

Introspection will prove that these lip services to our mothers did not materialise in practice.

Situation

Logically, women should constitute half the population. The burden of procreation i.e. conception, parturition and rearing up of children and siblings are borne by women, they should enjoy better and more social benefit and privileges. In reality, due to social influence on survival rate, there is great preference for sons, discrimination against girls and women in food allocation, nutrition, healthcare and education. In most societies, women are considered less valuable than men.

In a workshop on women in Kerala, a topic for discussion was '**Invisible Work of Women**'. The author of this dissertation while presiding over the session remarked that her work is very much visible but unrecognised and ignored/undervalued in the family and society.

The Indian Constitution does not discriminate on the basis of sex. But the girl child is discriminated right from the womb. This discrimination is reflected in **sex ratio** in India :

Year	Ratio
1951	946
2001	933

Areas of discrimination are:

I) ● Education, especially the type of education

In India, the literacy rate for women is **54.2%** (male literacy rate is **75.9%**). In West Bengal, it is **60.2%** and **77.6%** respectively. Even in Kerala, it is **87.8%** and **94.2%** respectively.

The dropout rates of girls at primary and upper primary levels are higher than boys. Only **8%** girls reach elementary level and **2%** up to graduation.

The same discrimination is reflected in work participation rate (total workers as percent of total population). In India, for male it is **51.93%** for female, it is **25.68%**. In Kerala, this **50.30%** and **15.28%**. In West Bengal, this is **54.23%** and **18.08%** respectively. It will be interesting to note that in hilly states e.g.

Himachal Pradesh (43.69%), Meghalay (40.51%), Mizoram (47.63%), Nagaland (38.25%), work participation for women is considerably high. (Census of India, 2001. Series 20).

Even with all this discrimination, the life expectancy of female at birth is better than that of male of India.

Year	Life Expectancy	
	Male	Female
1996-2001	62.36	63.39
2001-2016	66.93	68.80

The reason should be accounted for.

II) Low participation in economic activities

Most women are engaged in low-skilled and low-waged activities. It should be remembered that statistics and surveys do not reveal the real contribution of women to the labour force. In developing countries, women's work hours exceed men's by 30%. They contribute two-third of the hours worked in the world but earn about one-tenth of the world's income. The situation in the developing countries is still worse.

III) Violence

Violence can occur during any phase of a woman's life.

Gender violence through the lifecycle	
Phase	Type of violence present
Pre-birth	Female foeticide Battering during pregnancy (emotional and physical effects on the woman, effects on birth outcomes) Coerced pregnancy (e.g. rape)
Infancy	Female infanticide Malnutrition
Below 5 girls	Differential access to food and medical care Neglect of education Sexual abuse Physical violence
Adolescent and adult women	Emotional violence - through sense of rejection Early marriage Early pregnancy Sexual violence Forced marriage Domestic violence Dowry harassment Infertility/failure to produce sons Witch hunting High maternal mortality Honour killing

Phase	Type of violence present
Elderly women and Widows	Desertion Sexual harassment at workplace Sexual harassment (eve teasing) Acid burns Denial of entitlements Mental torture, living with fear, suspicion, false accusation of infidelity etc. Character assassination Desertion Neglect - emotional, financial, social Medical neglect

(Source: Gopalan S, Shiva M, editors. *National Profile on Women, Health and Development: India*. New Delhi: Voluntary Health Association of India; 1999; *Violence against women-A priority health issue. Women's health and Development*. WHO, Geneva, 1997.)

a) Domestic violence

This is the most prevalent yet hidden form of violence. It is especially destructive because it takes place within the intimate circle of relationships. It specially affects the children both as victims and as mute witnesses of the act.

b) Marriage-related violence

- i) Dowry: System of dowry has led parents to regard girls as liability.
- ii) Battering.
- iii) Torture by husband and in-laws and relatives.
- iv) Mental torture for financial and infertility reasons, of widows and unmarried, uneducated and non-earning female members.

C) Rape: This is the most violent, abrupt and physically painful male aggression resulting in deep trauma, shame and guilt. Women become the first targets of family, caste or communal feud. Young, often very young, girls are victims of rape.

d) Kidnapping, abduction, prostitution, witch hunting etc. are other forms of violence against women.

All these factors, particularly gender-based violence, have significant health consequences. These considerably increase the risk of poor health and do seriously deteriorate the physical and mental health.

The following table illustrating crime against women will indicate the social position of women in India.

Nature of Crime	Years	
	1996	2001
Rape	14,846	16,075
Kidnapping & abduction	14,877	14,645
Dowry death	5,513	6,851
Torture	35,246	49,170
Molestation	28,939	34,124

These are only the tip of the iceberg. Many are not recorded due to various obvious reasons.

Health consequences of violence against women is revealed below :

1. **Non-fatal outcomes**

a) Physical : i) Injury (both external and internal organs), ii) Pregnancy, iii) gynaecological problems, iv) Sexually transmitted diseases, including HIV, v) Many vague psycho-somatic ailments.

b) Mental : Depression, fear and anxiety, low self-esteem, sexual dysfunction, obsessive-compulsive disorders and stress syndrome.

2. **Fatal outcome** : Suicide, homicide, maternal death and HIV, AIDS

(Source : *World Bank Discussion Paper, 1984*)

IV) Discriminatory practice in the family

Gender bias leads to discriminatory distribution of food affecting girl child's nutrition and low priority for her health leads to various chronic diseases. The poor health of women is due to the synergistic effects of high levels of infection, malnutrition and inadequate health facilities for women.

Neglect for women, even pregnant women and girl child, is prevalent in our society. This is coupled with early marriage, teen-age pregnancy and repeated childbirth. This contributes to ill health, chronic malnutrition, anaemia and mortality.

V) Lower position in political and social activities

In spite of reservation of seats in Panchayat, the representation of women in the elected bodies like Panchayat, Assembly, municipalities are negligible. Their position in the political parties and mass organisations is very low. Even if they are elected in esteemed positions, the male counterparts or male leaders of the organisations mostly dictate them.

The role of women in decision making in almost every aspect of life is poor. This casts an adverse effect on their general health, especially on their reproductive health.

VI) The following figures will add further light to the situation:

Marriageable age

India	West Bengal
19.5	19.6

Smear positive cases of TB (2002) in West Bengal	In age-group 0-14 years	
	Male	Female
	242	449

STD Cases	
Male	Female
28,848	36,219

Health Indicators		
Birth Rate	West Bengal	India
Years		
1951-61	42.8	41.7
2001	20.6	25.4
Death Rate		
1951-61	20.5	22.8
2001	7.0	8.4
Infant Mortality		
1981	91	110
2001	51	66

Birth Control Measures

Women are the main target for implementing and experimenting birth control programmes e.g.

- Intra-uterine contraceptive devices of various types (IUD);
- Oral Contraceptive pills of different categories;
- Mechanical and chemical barriers of different types
- Sterilisation (constitutes the major method of contraception)

West Bengal		
Year	Male	Female
2002-03	1873	243385

Termination of Pregnancy : 42,156 (in West Bengal)

No. of Maternal death : 2,144 (-do-)

The following facts should be noted to understand the health scenario:

Demographic Features	World	India	West Bengal
* Population Growth Rate	1.2	1.70	1.36
Total Fertility Rate	2.7	2.85	2.29
**Female Life Expectancy	68.1	65.4	69.3

* In developed countries (0.2)

** In developed countries (79.3)

Infant Mortality : (2001)0-4 YearsMaternal Mortality

	India	West Bengal	India	West Bengal	India	West Bengal
M	64	53	21.0	16.2	407	266
F	68	49	24.0	13.8		

Percent of Female aged 6-14 attending school

West Bengal	India
76.7	73.7

With this panoramic but incomplete background, Health of Women and the issue of Safe Motherhood have to be deliberated on.

Health of any individual depends upon fulfilment of the following basic prerequisites of life viz. food (nutrition), clear water for drinking (there is no safe drinking water), disposal of human excreta and other wastes, healthy environment and education. In one word, it is optimisation of social justice. Even with fulfilment of these prerequisites of life, disease, decay and death are inevitable components of life. Disability due to different ailments, age and accidents are also realities of life.

Diseases can be congenital and acquired and iatrogenic. They may also be classified broadly as communicable and non-communicable. Women have to face all these eventualities of life causing health hazards common to both the sexes.

In addition, women do not experience situations, which are gender-specific. Their internal and external sex organs are different anatomically. Physiology of these organs is monitored by specific hormones of the endocrine system different from their male counterparts. This knowledge is important for healthcare of women. The girl child may present few signs and symptoms like discharge or even slight bleeding from introitus and painful swelling of breast buds shortly after birth. These are of little consequence but persistence of these symptoms requires proper attention and investigation. If proper hygiene of the genital organs is not maintained, infection may occur. There is a pernicious belief amongst illiterate and perverted people that contact with virgin vagina cures venereal diseases. This has caused venereal diseases in girl children apart from sexual abuses discussed earlier.

Due to male dominance in the family and society, the girl child gets less care and suffers from malnutrition. This age-old discrimination and gender-based job division has resulted in diminution of their body mass (height etc.). Some authorities wrongfully suggest that calorie requirement of women is less than that of men.

As the girl child grows, the change is distinct during the transient phase between childhood and womanhood. Adolescence (puberty or pubescence) starts from puberche (growth of pubic hairs), thalarche (development of breast bud) and menarche (onset of menstruation). During this period, the body contour changes. There is change in the voice, behaviour pattern and psychology of the girl. She becomes emotional and sensitive to her environment and associates.

This is the formative period of her future reproductive life. Infection of genital organs and

endocrinological disorder may manifest during this phase.

Knowledge about her reproductive organ and its function is very important. Ignorance coupled with misguidance and perversion affects her health and reproductive function. Many superstitious ideas regarding menstruation are in vogue in many societies viz. it clears the bad blood, evil spirits etc. from the body. The girl should be taught that it is a physiological phenomenon relevant to conception. The girl (her uterus) becomes ready to accept a fertilised ovum. So, menstruation is generally a marker of pregnancy.

Safe Motherhood

All girl children are potential mothers. Pregnancy is a physiological phenomenon. Pregnancy cannot occur without male contact. During pregnancy, there are certain changes both in the anatomy and function of the body. The expectant mother should be informed about the process starting from occurrence of conception, its ante-partum and intra-partum period. Parturition (delivery of the baby) is also a natural process. It is not a disease. Special care based on correct knowledge is important.

Pregnancy is divided into the following phases.

A) Ante-natal:

1st trimester from the conception to 12 weeks of gestation.

2nd trimester from 12 weeks to 28 weeks

3rd trimester from 28th week till onset of labour

B) Intra-partum :

1st Stage : With onset of labour till full dilation of cervix.

2nd Stage : From full dilation till delivery of the baby.

3rd Stage : From delivery of the baby till expulsion of placenta and membrane (secundies).

4th Stage : One hour after 3rd Stage.

C) Post-Partum Period : 5-6 weeks after completion of child birth.

As has been stated earlier, contrary to the usual practice, ante-natal care should start from in-utero situation of a girl child. Modern science has enabled doctors to determine sex before birth. This should not be abused by enforcing abortion but proper care for a female foetus should be provided. The girl who is the future mother and pivot of any family should get preferential treatment in her childhood if we desire to build up a healthy nation.

All these phases from 1st trimester to post-partum period form a natural sequence but demand careful management in the form of knowledge (information to the expectant mother and her family). Some preventive measures, which may disturb the pregnancy e.g. over-work, trauma, lack of nutrition and hygiene of the relevant reproductive organs.

Trained family members and local birth assistants can be entrusted for these measures. They should be trained to identify the complications e.g. bleeding, pain (mild or severe) along with minor ailments like nausea, vomiting and other associated changes in the ante-natal period. Some complaints like swelling of legs, headache, giddiness should be carefully attended to. Investigation for Hb%, Blood grouping for ABO and Rh and regular recording of blood pressure is essential. As the pregnancy progresses, the growth of the foetus along with above-mentioned probabilities should be noted. Some complications specific during third trimester should be carefully identified e.g. blood sugar level and in specific cases, blood bio-chemistry. The position of the foetus and placenta in selected cases for further examination like ultrasound and study of amniotic fluid may be necessary.

Parturition (child birth) is also a natural procedure. Our traditional method of delivery is usual. The

present method imposed by male obstetrician has caused many unwanted interventions. However, a good ante-natal care will be helpful to determine the place of delivery. Domiciliary delivery is ideal provided it is done by trained persons and arrangements are at hand to tackle complications and emergencies. That is an arrangement for referral system as well as measures like flying squads to meet the emergencies. The above discussion reveals that safe motherhood depends on attitude of the family and community to safeguard the safety of both mother and child, its concern for rearing up every girl child and put women in the highest esteem in the family and community.

Women are specially designated to continue the progeny by nature through conception and child birth.

This is discussed separately in the heading of safe motherhood.

Apart from this child bearing, women may face some specific problems of their reproductive organs different from their male counterparts. There are gynaecological problems. It is properly addressed that bad obstetrics leads to gynaecological problems such as infection and injury to the genital tract and organs starting from cervical tear, perforation of uterus and rupture of uterus, desensus (prolapse) of genital and adjacent viscera.

Apart from obstetric legacies, women are prone to suffer from menstrual disorder like menorrhagia metro menorrhagia (excessive and irregular uterine bleeding) etc. The genital organs like ovaries, uterus, cervix, vagina, breast can develop tumors and cysts of different nature.

All these organs may develop malignancy like other organs of the body. Speciality of sex related organs apart from general effects is that most of them are hormone dependent and thus bear slightly enhanced risks.

It may be thus concluded that Health of Women needs special consideration because of age-old deprivation and social injustice inflicted on them.

Women health care and safe motherhood is dependent principally on its social component. Healthcare and motherhood should be delinked from medicare alone. The medicare should also be demystified and be designed on a need-based appropriate understanding of the issue.

A concerted effort by the social scientists and technical experts in the field of health care who are willing to combat the ill-effect of commodification of health will implement the appropriate innovative measures to protect women's health and ensure safe motherhood for our mothers.

কন্যার মূল্যঃ সামাজিক ধারণা ও তার পরিবর্তন

অধ্যাপিকা মালিনী ভট্টাচার্য
সদস্যা, জাতীয় মহিলা কমিশন

কন্যাসন্তানের কি অবমূল্যায়ন ঘটছে ?

আজ কন্যাসন্তান শিক্ষা ও কাজের ক্ষেত্রে প্রবেশের অধিকার অনেক বেশি করে পাচ্ছে তাতে সদেহ নেই। এর থেকে মনে হয় সামাজিক ও পারিবারিক ক্ষেত্রে তাদের মূল্য বেড়েছে। কিন্তু একই সঙ্গে অবমূল্যায়নের চিহ্ন দেখা যাবে সারাদেশে শিশুপুত্রের তুলনায় শিশুকন্যার আনুপাতিক হার ক্রমশ কমে আসায়। যে রাজ্য অর্থনৈতিক দিক থেকে যত অগ্রসর সেখানে প্রায়শ এই কমে আসার হার ততো বেশি। পশ্চিমবঙ্গে গত কুড়ি/ত্রিশ বছরে পূর্ণবয়স্ক জনসংখ্যার মধ্যে মেয়েদের আনুপাতিক হার ক্রমাগতে এখন জাতীয় গড়কে ছাড়িয়ে গেছে। এটা শুভ লক্ষণ। কিন্তু গত আদমসুমারির ফলাফলে পশ্চিমবঙ্গেও শিশুকন্যার আনুপাতিক হার কিছুটা হলেও কমেছে। তাই অবমূল্যায়নের প্রসঙ্গটি পশ্চিমবঙ্গেও অবাস্তর নয়।

কেন এই অবমূল্যায়ন ?

সংখ্যাগত যে তথ্যের কথা বলা হয়, তার থেকে অবমূল্যায়নের আশঙ্কা উঠে আসে এই জন্য যে, একটা সময়সীমার মধ্যে সারা দেশে পুত্রসন্তান এবং কন্যাসন্তান প্রায় সমান সমান সংখ্যায় জন্মগ্রহণ করলেও ০-৬ বছরের শিশুদের মধ্যে কন্যাদের মৃত্যুর হার সাধারণভাবে বেশ খানিকটা বেশি। এটা কখনো হত না, যদি তুলনামূলকভাবে শিশুকন্যারা পুষ্টি ও চিকিৎসার সুযোগ থেকে বঞ্চিত না হত। এখানে অবহেলা নিঃশব্দ ঘাতকের কাজ করে, আর অবহেলার পিছনে রয়েছে অবমূল্যায়ন। এই অবমূল্যায়নের একটা বড়ো কারণ, আমাদের সমাজে বংশের ধারক ও বাহক হিসাবে এখনও পুত্রকেই দেখা হয়। মেয়েদের 'পরায়া ধন' বা শ্বশুরকুলের জাতে তুলে দেবার জন্য বড়ো করে-তোলা 'গচ্ছিত সম্পদ' হিসাবে দেখার প্রবণতা অত্যন্ত প্রবল। দ্বিতীয়ত, বহির্জগতের কর্মকাণ্ডে মেয়েরা সময়ের বিবর্তনে যতই না কেন এগিয়ে এসে থাকুন, গার্হস্থ্যকাজের সামাজিক মূল্য কোথাও স্থীকৃত নয়। যে কারণে গৃহবধূরা সারাদিন ধরে কাজ করলেও তাঁদের 'বেকার' বলেই ধরে নেওয়া হয়। যে কাজ মেয়েদের কাজ বলে চিহ্নিত, সমাজ তাকে মূল্যহীন মনে করে বলেই কন্যাসন্তানকে 'বোৰা' বলে ভাবেন পিতামাতা, তাকে পার করার খাতিরে শ্বশুরকুলকে প্রচুর পরিমাণে ঘূষ দেবার জন্য তৈরি থাকেন তাঁরা। একেই আমরা বলি পণপ্রথা, 'দহেজ', যার প্রকোপ আমাদের আধুনিক সমাজেও বাড়তির দিকে। কন্যাসন্তানের বিয়ে দিতে হবে এবং তাতে পণ দিতে হবে - এই বাধ্যবাধকতাই পিতামাতার চোখে কন্যাসন্তানকে আরো অবাঞ্ছিত করে তোলে। এর ওপরে বর্তমান আইন অনুযায়ী মেয়েরা পৈতৃক সম্পত্তিতে ভাগ বসাতে চাইতে পারে এ ভয়ও আছে।

অবমূল্যায়ন সর্বব্যাপী

যে কারণগুলির কথা ওপরে বলা হল তা এখন আর বিশেষ কোনো সামাজিক শ্রেণীর মধ্যে আবধ নয়। যাদের বিষয়আশয় বলতে কিছুই নেই, সেই দরিদ্রশ্রেণীর মানুষের মধ্যেও পণপ্রথার ব্যাধি ব্যাপক আকারে ছাড়িয়ে পড়েছে। পশ্চিমবঙ্গে একমাত্র আদিবাসী গোষ্ঠীগুলির মধ্যে ছাড়া সর্বাই পণপ্রথার প্রভাব, পণের জন্য বিয়ে না হওয়া, পণের জন্য অত্যাচার এই সবই বাড়ছে। মেয়েরা শিক্ষাক্ষেত্রে চুকেও যে কিছুদিন বাদে স্কুলছেট হয়ে যায়, তার একটা বড়ো কারণ পরে পণ বেশি দিতে হবে বলে প্রাপ্তবয়স্ক হবার আগেই তাদের বিয়ে চুকিয়ে ফেলার প্রবণতা। এ ঘটনাও পশ্চিমবঙ্গে বিরল নয়। অন্যদিকে সম্প্রদ, শিক্ষিত মধ্যবিত্ত বা উচ্চবিত্ত সমাজেও কন্যাসন্তানের প্রতি অনীহাবশত গর্ভস্থ ভুগের লিঙ্গনির্ণয় করে কন্যাভুগ মোচনের মতো অপরাধ চোখে আঙুল দিয়ে দেখিয়ে দেয় ঐ সমাজেও কন্যাসন্তানের মূল্য কী।

এই অবমূল্যায়ন বৃত্ততে শিক্ষাব্যবস্থার ভূমিকা কী হতে পারে ?

পুত্র-এষণা আমাদের সমাজে এমনই একটা গভীর সংস্কার যে বড়োধরনের সামাজিক পরিবর্তন ছাড়া তার শিকড়ে টান পড়বে না। পরস্তু শিক্ষাব্যবস্থাই অনেক সময়ে এই সংস্কারের শিকার হয়ে পড়ে, যার ফলে শিক্ষণ প্রক্রিয়ায়, শিক্ষকের ব্যবহারে, পঠন পাঠনের বিষয়বস্তুতে মেয়েদের প্রতি বৈষম্য বা তাছিল্য প্রকাশ পায়, বা ঐসব বিষয়বস্তু বা পাঠ্যবই শিশুকন্যার মনে ঐগুলির সঙ্গে একাত্মতার কোনো সুযোগ তৈরি করে না। হাত্তের কথা ভেবেই পাঠ্যপুস্তক তৈরি হয়, ছাত্রীর কথা ভেবে নয়। পাঠ্যপুস্তকে মেয়েরা যখন কেবল মা, স্ত্রী এবং গৃহবধূর ভূমিকাতেই অবতীর্ণ হন, তখন ছাত্র বা ছাত্রী যেই সে বই পড়ুক, মেয়েদের ভূমিকা সম্বন্ধে প্রচলিত সংস্কারটাই তার মনে আরো দৃঢ় হয়ে গেড়ে বসে। কেবলমাত্র শিক্ষাব্যবস্থার সাধ্য নেই এই মানসিকতার আমূল পরিবর্তন করার। তবে সমাজবদলের আন্দোলনে শরিক হিসাবে শিক্ষাব্যবস্থাতে কিছু করার থাকে। এটাই আজ শিক্ষাবিদ্রাম সকলেই মেনে নিয়েছেন যে 'এটা উচিত', 'এটা উচিত নয়' কেবল এই ধরনের নীতিগত ফতোয়া পাঠ্যপুস্তকের মাধ্যমে জারি করে ছাত্রছাত্রীর মানসিকতাকে গড়ে তোলা যায় না। যথা, পাঠ্যপুস্তকে 'ছেলে মেয়ে সমান' এই উচ্চারণটি থাকার প্রয়োজন নিশ্চয়ই আছে। কিন্তু একই সঙ্গে যদি ক্লাসঘরে বেঞ্জির টানটানি পড়লে মেয়েরাই মাটিতে বসতে বাধ্য হয়, তাহলে উচ্চারণের সঙ্গে ব্যবহারের যে বিরোধ ঘটে, তার ফলে ঐ নীতিবাক্য তার গুরুত্ব হারায়। পাঠ্যবইয়ের পাশাপাশি শিক্ষকের ব্যবহার এবং শিক্ষণ পদ্ধতিরও তাই যাচাই হওয়া দরকার। আজকাল প্রাথমিক স্তরে ছাত্র ও ছাত্রীরা প্রায়শ একসঙ্গেই পড়ে। এটা তাদের পক্ষে এবং শিক্ষকের পক্ষে একটা সুযোগ সমাজে যে বৈষম্য রয়েছে, তাকে চিহ্নিত করে তার সম্পর্কে সতর্ক হবার। প্রথাগত ছাড়া বা গল্পে অনেক সময়ে মেয়েদের যে রক্ষণশীল চিত্র দেখা যায়, অনেক শিক্ষাবিদ মনে করেন তার 'কুপ্রভাব' থেকে ছাত্রছাত্রীদের বাঁচাতে গেলে এগুলোকে বদলানো বা বাদ দেওয়া প্রয়োজন। চল্তি ছাড়ার খুকুকেই কেন পদ্মদীঘির ঘাটে জল আনতে যেতে হয় এবং এ কথা পাঠ্যপুস্তকে থাকা উচিত কিনা এপ্রশ্ন নারীবাদীরা অনেক সময়ে তুলে থাকেন। যদি লিঙ্গবৈষম্যের বীজাগুহীন কোনো সম্পূর্ণ বিশুদ্ধ পরিবেশে শিশুদের বড়ো করে তোলা যেত, তাহলে এই প্রশ্নের তাৎপর্য থাকত। কিন্তু তা যখন সম্ভব নয় এবং চিরাচরিত সাহিত্যের সঙ্গে পরিচিত হবার যেহেতু অন্যতর ভাষাগত ও সাংস্কৃতিক মূল্য আছে, তাই এগুলিকে বাদ দেওয়া বা বদলে দেওয়ার কথা না ভেবে বরং শিক্ষকের ওপরেই এই দায়িত্ব রাখা যেতে পারে যাতে সৃজনশীল শিক্ষণপদ্ধতির মাধ্যমে তিনি পাঠ্যবস্তুর মধ্যে বিকল্প প্রাসঙ্গিকতা নিয়ে আসতে পারেন। যেমন, জল আনা ছাড়া খুকু আরো কী কী করতে পারে, তার একটি তালিকা তৈরি করে তাই নিয়ে বিকল্প ছাড়ার লাইন ক্লাসের মধ্যেই তৈরি করা যায়। সেই বিকল্প পাঠ্যে খুকু মাছ ধরতে বা ধূড়ি ওড়াতে বা স্কুলে লেখাপড়া করতেও যেতে পারে। এছাড়া ক্লাসঘরের বাইরেও শিক্ষকের প্রশ্ন তোলার এবং ছাত্র/ছাত্রীর মনে প্রশ্ন জাগানোর দায়িত্ব থাকে। যেমন, স্কুল থেকে বাড়ি ফিরে ছাত্রও তার বোনের মতো মাকে ঘরের কাজে সাহায্য করে কিনা, এ প্রশ্ন একজন শিক্ষক করতেই পারেন। একটি ছাত্রী স্কুলছুট হলে তার বিয়ের জোগাড়যন্ত্র চলছে কি না বা সংসারের হালে তাকে জুতে দেওয়া হয়েছি কিনা, এ খোঁজও শিক্ষককেই করতে হবে।

'জনসংখ্যা সংক্রান্ত শিক্ষা প্রকল্প' কী ও কেন ?

পরিশেষে জানাই, এ সম্বন্ধে কোনো স্পষ্ট ধারণা করা যাচ্ছে না। আমাদের দেশের জনসংখ্যানীতিতে সাধারণত জনসংখ্যা নিয়ন্ত্রণের প্রসঙ্গটিই সিংহভাগ নিয়ে থাকে। এর ভারটা পুরোটাই পড়ে যায় মেয়েদের কাঁধে। তাছাড়া, যেদেশে পুত্র-এষণা এত প্রবল এবং তার ফলে কন্যারা এত অবাঞ্ছিত, সেখানে ছোটো পরিবারের ওপর অস্বাভাবিক জ্ঞানের কন্যাসংস্কার সম্বন্ধে অনীহাকে আরো তীব্র করে তোলে। জনসংখ্যাসংক্রান্ত শিক্ষা প্রকল্প বলে যদি কিছু থাকে, তাহলে সেখানে কেবলমাত্র সংখ্যা কমানোর দিকে নজর না দিয়ে জনসাধারণের জীবনের গুণগত মান বাড়ানোর প্রসঙ্গটিকে অগ্রাধিকার দিতে হবে। কন্যাসংস্কারের অবমূল্যায়ন ঠেকানোর এটাও একটা উপায়।

POPULATION AND SUSTAINABLE DEVELOPMENT

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1. Introduction

The growing pressure of population on the planet that we live in is causing anxiety because the carrying capacity of the earth is limited. Economisation in the use of scarce resource, as they say, is no answer to this problem. As W. S. Jevons, the Nineteenth Century British economist pointed out, it is the very economy in the use of a scarce source that leads to its extensive consumption. Technological improvement in blast furnace technology that economises the use of coal leads to its larger use (via enhanced demand for thermal power), as Jevons rightly pointed out. To take another example from post Jevons era, more energy efficient automobiles lead to an enhanced demand for fossil fuel, as we observe today. Technological improvement does not appear to be the device that might economise the use of natural resources for meeting the consumption demand that comes from ever growing human population.

One way of looking into this problem is to take the view of T. R. Malthus, a British economist of pre Jevons era, who envisaged that a natural check on the growth of demand (for food) comes from checks on population growth. If the growth of population is arrested, a deceleration in the growth rate of demand takes place and consequently, the limits to sustainability does not work as imminent threat to the survival of human society in this planet.

Malthus and Jevons have their presence even in late 20th and early 21st century thoughts when the issues related to limits to growth are discussed. Why this is so and to what extent such limits exist in reality are the points at issue in this essay. We would discuss this theme first by considering the scenario of population growth in the present world. Following this, the paper discusses the limits to growth that might exist on human society. The discussion encompasses the contemporary issues on sustainable development of human civilisation.

2. The Population Scenario

The estimated mid - year population of the world had been 255.54 crs. in 1950. By 1980 it increased to 445.46 crs., and at the end of the millennium, the estimated population of the world was 622.83 crs. The growth rate of world population at 1950 was 1.7 per cent. At this rate of growth, the world population was expected to double by next 41 years, i.e. by 1991. The doubling, however, took place by 1987 because the growth rate of world population in 1960 - 1970 and in 1970-1980 had been higher than the population growth rate in 1950-1960.

What about the future trend? It is estimated that the world population is now growing at the rate of 1.4 per cent per year (average of yearly growth rates in 1990-2000 A.D.). If it keeps on growing at this rate it will double by the year 2041 A.D. The prediction, however, is that the growth rate will decline to less than one per cent by 2010 and by 2225, the growth rate will decline further to 0.6 per cent. As a result, the population doubling time might increase.

There is of course a wide regional variation in the growth rates of population. At the time world population was growing at the rate of 1.4 per cent per year, the growth rate in industrial countries was only

0.3 per cent and the estimated population in the industrial countries was only 120.2 crs. at the end of the 20th Century. On the other hand, the developing countries accounted for about 503.6 crs. of the population in this planet at the beginning of this century. The average growth rate (1990-2000 A.D.) was also higher (1.7 per cent) in the developing countries.

Peoples Republic of China with an estimated population of 130.9 crs. is the most populous country in the world. India ranks second (estimated population is 107.3 crs.). But then, the growth rate of population in India marginally lower (1.7 per cent) than that of the average of the developing countries and China has already lowered the growth rate to a figure of 0.9 (average 1990-2000 A.D.)- much lower than the growth rate in the developing countries. All these have a positive impact on increasing the population doubling time at the global level.

Among the developing countries, the population growth rate reported in the least developed countries was 2.5 per cent per year (average 1990-2000 A.D.) and in Sub-Saharan Africa, it was growing at the rate of 2.8 per cent per year. In fact, the fastest growing region in the global population map is Africa. Thus, in Madagascar, the growth rate is 3.2 per cent and in Rwanda it is as high as 6.4 per cent. The population growth rate is high also in some of the Arab countries such as Libya (3.4) and Oman (4.2).

Another important point to be noted is that almost all over the world except in Sub-Saharan Africa, there is a declining trend in the growth rate of population. As we pointed out, the population growth rate at global level is now (1990-2000 A.D.) 1.4 per cent per year. This reflects a declining trend because the average growth rate during 1970-1990 was 1.8 per cent per year. The declining trend was even observed in the industrial countries (from 0.7 per cent to 0.4 per cent) where the growth rate was already low. In the developing countries the population growth rate declined from 2.2 per cent (average of 1970-1990) to 1.7 per cent (average of 1990-2000 A.D.). The most impressive was the performance of China whose present growth rate (0.9) marks a drastic deceleration from a growth rate of 1.8 per cent per year during 1960-1990.

In the least developed segment including Sub-Saharan Africa, the growth rate of population roughly remained the same between 1970-90 and 1990-2000 A.D. (at about 2.7 per cent). That the global growth rate of population did not decline below 1.4 per cent at the end of the century is largely due to the fact that the population growth rate did not have a declining tendency in the least developed countries including Sub-Saharan Africa. However, even in Sub-Saharan Africa, the projected growth rate for 2010-2025 and 2025-2050 are 1.7 and 1.6 per cent respectively. Both the rates being much lower than the growth rates in 1990s, a further deceleration in the growth rate of World population is likely to take place so that the population doubling time would increase further. This is a positive development. One should, however, note that even then, the population of the World is expected to reach the level of 907.9 crs. by 2025 - a number which is 3.5 times higher than the population level at 1950.

3. Limits to Population Growth

Just as the exponential growth of the guppies could endanger their existence in the aquarium, it is argued that the growth of human population may endanger the very existence of the species; even the

The doubling of an entity growing at x per cent per year is roughly equal to $70/x$ years (where x is roughly less than 5 per cent). Hence the doubling time for world population growing at 1.4 per cent per year would be $70/1.4 = 41$ years

existence of the planet itself might be at stake. May be we are yet to reach that stage, but there is a strong possibility that we would face such a crisis in future if the population goes on increasing in this way. There is and there must be a limit to the growth of population.

Thomas Robert Malthus (1766-1836) the celebrated British clergyman was the first among the economists to write about the limits to the expansion of human population which grows at a geometric rate. The limiting factor, according to Malthus, was food. Food, according to this theory, can grow only in arithmetic progression, i.e., at the rate of 2,4,6,8,10.....etc. due to the law of diminishing returns on the enhancement of other inputs on land which remains fixed; we cannot reproduce land - the amount of land is given by nature. Since the population grows at an exponential rate and food availability increases at arithmetic rate, there develops a supply gap that leads to shortage of food. Malthus, however, did not envisage a collapse of the human society. His perception was that the system would somehow adjust to the existing level of availability of food by developing checks on population growth. War, famine and pestilence work as positive checks and population control works as a negative check to unrestricted growth in population.

The 200 years that have passed since Malthus published his '*An Essay on the Principle of Population as it affects the Future Improvement of Society*' (1798) has proved that his observation on so called shortage of food was wrong because the so called diminishing returns is applicable only for a constant state of technology in agriculture. However, there was an enormous development in agriculture science during last 200 years so much so that the returns to scale often becomes increasing. This is reflected in the fact that the unit cost in agriculture has actually declined in the USA (where the new agricultural techniques were used most efficiently) over last 150 years. Human ingenuity may explore the possibility of developing the agriculture technology further to meet the need of the incoming generations as it has done in the past so that the limits set by 'food' may be overcome even in future, as it has been done in the past.

Followers of Malthus sometimes add to 'food' the wide range of resources essential to an industrial economy. It started with W. Stanley Jevons who published *The Coal Question* in 1865 to argue that limits to industrial growth in Great Britain was largely set by the limited stock of coal, just as the limited supply of land has set constraint to the agricultural growth. However, just as considerable agricultural advances were made soon after Malthus published his essay on population, soon after Jevons wrote, the age of fossil fuel began and the '*Coal Question*' lost its relevance. In fact, the entire issue of limits to growth from nonrenewable resource was shelved; the technological development was found to have refuted the Malthusian or Ricardian argument of stationary state.

There was a rebirth of Malthus after the Second World War with the publication of Fairfield Osbomi's book *Our Plundered Planet* (1948) and Samuel Ordway's *Resources and the American Dream* (1953). This in fact was the beginning of Neo-Malthusian approach to environmental economics. Malthus was found to be relevant because, all said and done, world has finite arable land, mineral deposits and population carrying capacity. Even the available energy is limited in supply. There is thus a physical limit to resource use and the society cannot overshoot that limit. This, in brief, is the essence of neo-Malthusian argument.

The neo-Malthusian argument is placed with a 'technocratic' voice in the now famous book '*The Limits to Growth*' (D.H. Meadows, et. al., New York: University books; 1972). Unlike Malthus and

Jevons, '*Limits to Growth*' identified multiple factors constraining the economic growth. We shall discuss the argument of this book a bit elaborately.

4. The Club of Rome and Limits to Economic Growth

In 1968, a group called 'Club of Rome' consisting of 30 individuals from 10 countries - economists, natural scientists, mathematicians, businessmen, educators etc. gathered in Rome under the auspices of Dr. Aurelio Peccei who was one of the top managers of the Fiat and Olivetti Companies, to discuss environmental problems facing humanity. '*The Limits to Growth*' is the report of this team and this report had a great impact on the intellectuals for the next one decade. The consensus of the Club of Rome was that there are limits to economic growth. There are a number of factors any of which may work as the binding constraint on economic growth. In order to examine how the constraints set in, the 'Club of Rome' made a statistical analysis with respect to eight explicit variables; Population level, industrial output, pollution index, non-renewable resource stocks, services, per capita food availability, rates of birth and death. It then considered the historical trend of the data related to all the eight variables. The period that was chosen was the first seventy years of the twentieth century. From the historical trend, as analysed in the report, the 'Club of Rome' predicted that there would be food shortage in the early part of the 21st Century causing shrinkage of the population. It also predicted that economic growth would decelerate and tend to zero well before the mid - 21st Century, unless the key variables are kept under control. The major emphasis was on controlling the net reproduction rate of the population. It suggested that the global population must be stabilized at the stationary level by setting net reproduction rate equal to zero so that economic development remains sustainable. Effective antipollution measures and reduction of the production of industrial commodities, besides the increase in food production by diverting capital to agriculture had been some other suggestions made by the Club of Rome.

5. A Critique of Limits to Growth

The basic weakness of *Limits to Growth* was that it did not consider the possibility of technological progress that may reduce the role of the non-renewable resources in production of goods. Economic growth depends basically on innovation. History of modern economic development is the history of innovation. Innovation limits the definition of non-renewable resource. Metals were often considered as non-renewable. Innovation changed the idea. All metal deposits are now recyclable. At the existing level of knowledge of technology, only fossil fuels and few other materials such as potash and phosphate are found to be non-renewable. It is quite likely that in future, through human ingenuity the society will be able to develop a technology that may minimize the role of fossil fuel by opening the ways to exploit alternative sources of energy such as tidal wave and solar power.

In a sense, scarcity is good for human civilization. It escalates the price of the scarce resource. High price encourages research for alternative technology that would conserve scarce resource and shift the emphasis to alternative which is more abundant. This is true even with respect to land which is non-reproducible. Land scarcity encourages research on agricultural technology that may enhance agricultural production without enhancing the requirement of arable land which is scarce.

As we all know, there is much heterogeneity in the world and it does not really make any sense to speak of global crisis before one analyses the regional features of the environmental problems. The Club of Rome realised this point and in its second report (1974), instead of a global model the experts suggested ten regional models and concluded that a regional collapse in the food deficit and crowded regions was

more likely than a global one. At their 1982 meeting the consensus of the Club appeared to reject the notion of physical limits to growth. In fact, in 1980s the emphasis switched from exhaustible to renewable resources and the main point of the Club of Rome - that the growth is constrained by non-renewable resource - lost much of its edge.

6. Carrying Capacity of the Earth: The Real Issue

Does it imply that the concern for environment which is developing now-a-days is based on some wrong understanding about the prospect of human intervention towards meeting the limits set by nature? Recent research on the subject indicates that this may not be true. The human interaction with nature is not based only on disturbing the topsoil of the earth or extracting its minerals. For production and consumption that the modern society undertakes, the nature not only supplies energy and materials for which there might exist still unexplored or under-explored alternatives in various forms. Indeed, it might so happen that limits to growth in the sense of Jevons might be avoided at least within the considerable time horizon, by exploiting these resources. But then, there is another source of danger that the modern civilization can ill afford to ignore.

The energy intensive production and consumption pattern that modern civilization has adopted disturbs the bio-diversity and thus affects the global life support system. It also disturbs the global life support system by putting pressure on the waste sink of the earth. It is true that the waste sink has assimilative capacity and usually the wastes are biologically and/or chemically processed by nature itself, so that the capacity of the waste sink largely remains undisturbed. But then, there are cumulative and conservative pollutants for which there is no natural process that may transform them into harmless substances. Real threat that the society is facing today, thanks to the technological option that the society has exercised, is the threat to the assimilative capacity of mother earth, so much so that the global support services that we get from nature free of cost is being disturbed. This coupled with the loss of biodiversity, puts constraints on the prospects of unlimited expansion of production and consumption. If the process continues, there is every possibility that the very existence of the *homo sapiens* as a species would be threatened. The danger does exist; the problem of sustainability is very much there, although it may not be taking shape in the way our predecessors had conceived. We may marginalize Jevons but we cannot set aside the issue of sustainable development.

DRUG ABUSE

Dr. Satyajit Ash

Most cultures have their own pattern of sanctioned use of psychoactive chemicals. This may differ from culture to culture and is also prone to change over time. But when regular use of these substances begins to interfere with normal functioning, creating behavioural changes that would be undesirable to people from any cultural background, substance use has turned to substance abuse.

Substance abuse - the misuse of alcohol, cigarettes and both illegal and legal drugs and medications and other mood-altering substances - is by far the predominant cause of premature and preventable illness, disability and death in our society. Social stigma has blocked the road to understanding of substance abuse more than any other disease. Society has long viewed the affliction as a psychosocial problem alone - the sign of an individual devoid of discipline or morality. Recent scientific breakthroughs, however, have begun to dramatically alter our views on alcoholism. The myth that alcoholism is a moral problem is yielding under the weight of evidence that the disease has its roots in biological causes. This article aims to provide a holistic understanding of the *disease of chemical dependency* and share some ideas regarding its prevention.

Drugs, in the context of 'drug abuse' refers to any psychoactive chemical or substance that alters sensory experiences and produces a 'reward', i.e. pleasure or alleviation of discomfort (Macdonald, 1984).

Some of the commonly used drugs are **Tobacco**-cigarette, biri, gutkha, jarda, khaini and pan parag, **Alcohol**, **Cannabinoids** like ganja, bhang, charas, **Opioids** like opium, heroin, spasmoproxyvon and codeine as in cough syrups, **Sedative and Hypnotics**, **Solvents** dendrite, correction fluid and **Stimulants**. In popular nomenclature, however drugs mean substances other than tobacco and alcohol.

Abuse, Addiction, Dependence

There are wide variations in the meaning of terms that are used for describing the different facets and aspects of substance use. Here **drug abuse** means self-administration of any drug in a culturally disapproved manner that has adverse consequences.

Addiction and **dependence** are closely related terms. The expression addiction is generally used by non-technical persons. It entails a behavioral pattern of drug abuse characterized by excessive and habitual involvement with the use of a drug (Compulsive use), of ensuring its supply and availability and a high tendency to relapse after discontinuation. Due to its pejorative connotation and associated stigma, the World Health Organization (WHO) does not endorse this term. Dependence refers to the physiological state of adaptive changes in the brain produced by repeated administration of a drug. This necessitates continued administration to prevent the appearance of withdrawal symptoms (Stahl, 2003).

Thus while the term *addiction* is based more on the behavioural changes, *dependence* refers more to the physiological and neurochemical changes that take place within the individual.

In this article the terms drug, chemical and substance are used interchangeably. And so is addiction and dependence.

Epidemiology

There is no general population based comprehensive study of incidence and prevalence of substance use available in India. However available data suggest that:

- ❖ In urban India about 1 in 10 individuals who drink, becomes alcohol dependent or alcoholic. In rural India however studies reveal that 1 in 5 individuals who drink becomes dependent (The Week, Oct 25, 1992)
- ❖ Prevalence of drug abuse and dependence varies from 0.4% to 4.0% (WHO, 2001)
- ❖ Alcohol use disorder is the fifth (5th) leading cause of disability adjusted life year (DALY) in the 15-44 years age group of both sexes across the globe. (One DALY can be thought of as one lost year of 'healthy life'-and the burden of disease as a measurement of the gap between current health status and an ideal situation where everyone lives into old age free of disease and disability).
- ❖ A longitudinal study done by the Drug De-addiction and Treatment Centre (DDTC), PGI, Chandigarh from January 1978 to December 2003, makes a point when it says, "addiction is on the increase among the adolescents as teenagers are vulnerable due to experimentation and risk-taking behaviour."
 - More than 78 per cent of the total 85 adolescent addicts tried smack, cannabis, inhalant and smoking to have "just the feel of it," the findings said.
 - Initiation to drugs takes place as early as 12 years to 14 years.

Understanding drug abuse and addiction

The enormity of the problem is perceptible. Scientific advances have been staggering over the past couple of decades in the area of addiction. But this has not necessarily led to any palpable change in the societal perception of an addicted individual. The lack of percolation of knowledge to the common masses makes for improper understanding and subsequent ineffective handling of addiction. Thus it becomes imperative to share some of the current scientific understanding regarding drug abuse and addiction.

Drug abuse takes place in a continuum. At one end it begins with an initial exposure to the drug, which is usually voluntary in nature. At the other end of the spectrum lies dependence. This dependent state entails a person's loss of control over the use of chemicals, (much like Abhimanyu from the Mahabharata, where an individual gets into a situation on his own but is unable to get out of it).

Thus while the determinants of the early stages of involvement with drugs is more of psychosocial in nature (environment, peers, stress, cultural sanction etc.), the dependent stage involves a biologically altered state of brain. A dependent brain is a changed brain and it has got enormous implications in understanding a human being with substance abuse problems.

Now let us critically examine how society perceives the drug abuser. The most beneficial social perception of a substance user is that he is a victim of his socio-familial condition. However the most common view being the general assertion that drug abuse is simply a moral problem. It is essentially about a 'wicked person' who chooses to become an addict-therefore he is to be shamed and punished and that is all he deserves. The unprecedented advancement in neurobiology and behavioural sciences, on the contrary, has established drug addiction as a brain disorder - a chronic, relapsing medical illness, comparable to chronic disease like diabetes mellitus. (Leshner, 1997; McLellan et al. 2000).

There is increasing evidence that craving and addiction to virtually all substances of abuse are related to the dopaminergic systems in the brain—especially the mesolimbic reward system and the areas to which it projects: the limbic system and the orbitofrontal cortex (Leshner et al 1999). Activation of this system is what appears to keep drug users taking drugs.

The unacceptable behaviour and attitudes that distance an addict from the people around him could as well be the result of a “sick” mind (Brain). He could still be held responsible for his deviant behaviour and yet he deserves to be understood.

The dependent person therefore is a patient and needs empathy, understanding and more than anything else—treatment.

Aetiology: What causes drug abuse?

It has been noted that substance abuse has a multifactorial aetiology (Tarter et al 1989). First the ***genetic predisposition*** to substance abuse needs to be recognized. Evidence from family and twin studies implicates a genetic predisposition to alcohol and substance abuse. Temperament, that is a person’s constitutional nature that affects his way of thinking, feeling and behaving has an important role in the development of a substance abuse disorder. This also has a strong heritable contribution. Research findings show that children of alcoholics are at approximately fourfold increased risk to develop alcoholism themselves.

Secondly, substance abuse needs to be viewed within a ***developmental perspective***. At various points in one’s life an individual is exposed to a variety of different environmental contingencies and institutions. How these environmental factors shape the individual so as to incorporate alcohol or drugs into their behavioural repertoire is a concern that can be understood within the developmental perspective.

Thus just having a genetic vulnerability does not necessarily mean it is sufficient to induce drug use. An environment where the substance is available, its symbolic and cultural significance and acceptance in the particular society and the social milieu of the individual contribute importantly to the eventual expression of the substance abuse disorder.

We find that there are certain factors that could make an individual more vulnerable to substance abuse (risk factors). Earlier focus had been only on the risk factors. Research today suggests that there are certain resilience factors, intrinsic or attainable that help in protecting an individual from substance abuse problems (protective factors). Amongst these multitude of factors, the relative contribution of each however could not be ascertained.

Given below are some of the risk factors and protective factors with respect to substance abuse disorder (Merrill et al., 2001).

RISK FACTORS	
Environmental: <ul style="list-style-type: none">• Widespread drug availability• High crime rate• Poverty and industrial decline• Acceptance of drug within the community	Interaction with family, peers and school: <ul style="list-style-type: none">• Low parental affection• Childhood abuse• Parental substance misuse• Family conflict• Lack of communication between parents and children

<p>Individual risk factors</p> <ul style="list-style-type: none"> • Low self esteem • High sensation seeking or risk taking • Attitudes favorable to drug use • Self destructive behaviour • Early and persistent behavioural problems. 	<ul style="list-style-type: none"> • Drug using peers • Peer rejection • Failure at school • Dropping out of school <p>Individual risk factors</p> <ul style="list-style-type: none"> • Genetic vulnerability • Mental health problems • Precocious sexual behaviour • Homeless and in foster care
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<p>PROTECTIVE FACTORS</p> <ul style="list-style-type: none"> • Positive temperament • Intellectual ability • Supportive family environment • Caring relationship with at least one adult • External support system that encourages positive values • Social support system that encourages personal efforts.

What is to be done?

Drug addiction being a progressive (it worsens over time) illness, there are two aspects of addressal-prevention and treatment.

Prevention :

Efforts at mass sensitization and awareness building, social planning and law enforcement have led to few changes in the magnitude of the problem of substance abuse (Mack et al, 2003).

Primary prevention efforts have to be focused on school and work based education programmes and mass media campaigns. Programmes targeted towards teachers, parents and school students have significantly increased knowledge about alcohol and substance abuse.

Life skills training focuses on areas like problem solving, self esteem building, assertiveness, interpersonal relationships, value clarification abilities, decision-making, and drug refusal. Such training may be more effective in changing attitudes than educational interventions. Because the latter is aimed at increasing knowledge alone.

Social policy and legal efforts - limiting availability, manipulating price of licit drugs like alcohol and tobacco, implementing age restriction policies and controlling outlet availability effectively are ways to reduce overall consumption.

“A recent study demonstrated that alcohol related hospital charges in 1998 in New Mexico, USA, were US \$ 51 million in comparison with US \$ 35 million collected as alcohol taxes (New Mexico Dept. of Health, 2001), clearly showing that communities spend more money on taking care of alcohol problems than they earn from it.” (WHO, 2001).

Treatment

Discussion about treatment of drug dependence is beyond the scope of this article. But it is important to know a little about the early signs and symptoms of drug abuse and dependence to facilitate quicker intervention. As in other medical ailments, in substance use disorder too, earlier the treatment better is the prognosis.

A few early signs and symptoms are given below:

- Physical evidence of drugs and drug paraphernalia
- Lack of consistent routine and discipline.
- Behaviour problems and poor grades in school
- Emotional distancing, isolation, depression, or fatigue
- Change in friendships or extreme influence by peers
- Hostility, irritability or change in level of cooperation around the house
- Lying or increased evasiveness about after school or weekend whereabouts
- Decrease in interest in personal appearance
- Physical changes such as bloodshot eyes, runny nose, frequent sore throats and rapid weight loss.
- Changes in mood, eating or sleeping patterns
- Dizziness and memory problems

Conclusion

Psychoactive chemicals or drugs form one of the most critical issues for the health of our children and the well being of our Nation. However one major barrier is the tremendous stigma attached to being a drug user or worse, an addict. The common view is that drug addicts are weak or bad people, unwilling to lead moral lives and to control their behaviour. To the contrary, addiction is actually a chronic, relapsing illness that results from the prolonged effects of drugs on the brain. However a holistic understanding of drug abuse and addiction necessarily involves a biopsychosocial model i.e. understanding addiction as a brain disorder, the initiation and final outcome of which are deeply embedded in its behavioural and social matrix. Prevention of substance abuse involves reducing the supply or availability of the drug and equipping the individual to say no and effectively cope in situations where drugs are present. Early identification and treatment are necessary for better prognosis.

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IMPORTANCE OF WOMEN'S PARTICIPATION IN A COUNTRY'S DEVELOPMENT

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ABSTRACT

Development in today's context does not merely mean an economic development. In fact, no economic development can sustain itself without social development. The process of a country's development is thus viewed through raising the standard of living of the masses, alleviation of poverty and equitable distribution of resources irrespective of gender, caste and religion. The fruit of development should necessarily reach the hands of the poorest of the poor and also the economically and socially deprived population. At the same time it is obviously true that meeting the regional imbalances, reaching benefits of development to all and ensuring social justice and empowerment, focus should be on active participation of community, both men and women. When women move forward, the family, the village and wholly a nation moves. Keeping in vision the expanding women's horizon in decision making and control over resources, Govt. of India has launched various schemes in recent years to achieve the ultimate goal of complete development.

INTRODUCTION

From the first day of life, man is dependent on woman and it is the woman who in turn lends her full support to the former in every walk of life. But it is unfortunate that in our society, both in affluent and backward regions, the birth of a girl is still frowned upon. Status of men and women is equal only in the eyes of law. In reality millions of women work with low status, are deprived of education and so on. The declining sex ratio clearly points out the fact that female species has no right to be born and no right to survive. There is a strong preference for male child as sons are perceived to be future bread earners and old age security for parents. This gender bias has bared the very face of Humanity of such a nation whose nationhood is equated with Mother India image - 'The Bharatmata'. Thus the issue of Women Empowerment arises. It is necessary to say that empowerment of women signifies in terms of self-esteem, self confidence, personal ability and capability of women to command over the resources, attain socio - political participation, economic independence and leadership in community at all levels. Hence it should not be confined within some programmes and schemes. Law is only a partial solution, the most important is mindset that prejudice against girls and women.

WOMEN IN THE PAST AND WOMEN IN THE PRESENT

Women in Vedas and Upanishads were put on the high pedestal of a mother or Goddess. No branch of knowledge was ever denied to women and no ceremony was considered to be complete in the absence of women. They were completely free to take the decisions regarding what they wanted to do. The names of Gargi, Maitreyee are still remembered.

But the situation changed during the Middle Ages when India was subjected to frequent foreign invasions. Education of women suffered badly and thus female literacy rate sharply fell. Although in British

India, some reformatory movement was made, at the time of Independence, the picture was not so bright. Education was the privilege of a very minute fraction of the people.

Government of India through its five year plans gives education the top priority irrespective of sex and place. Thus the provision and opportunities of girls' education undoubtedly increased but it is very unfortunate that the gender disparities still persist particularly in rural areas and among disadvantaged section of the society. Even today incidents like dowry death, eve teasing and molestation of women are the burning symbols where Indian women are not given their due positions in society. Yet there are found so many examples of women on the top of their career. The services like defence, engineering, business which were once considered only for men are now successfully captured by women. Though there are a number of women who have not got any exposure to the outer World, this does not mean that they lack potential. In fact they have immense energy within them. When opportunity comes, they will surely rise to new heights.

WOMEN AND EDUCATION

Education shapes the life and life style, it acts as a catalyst of socio - economic transformation. It is not only a bunch of information, it is something which develops general reasoning skill among persons. inculcates the thoughts of mind, induces changes in beliefs and values, builds a qualified, creative and effective workforce that can adapt to new technology and vision of continuously changing World. Today's world acknowledges the capacity of education to eradicate poverty and to ensure better quality of life. In India, gender discrimination in education prevails in rural areas and poor section of the society. The total literacy rate in India, according to 2001 census, is 65.4% where male literacy is 75.85% and corresponding figure for female is only 54.16%. This is not only due to lack of resources but it is due to social attitude, such as lack of potential interest, lack of incentives and also prevalence of prejudice, superstition and indifferent attitude of learners that hampered the programme of female literacy in India. Smt. Durga Bai Deshmukh Committee (1958) emphasised the need for special care and support to women's education within the prevailing socio-cultural environment. It focussed on the wide disparity in the education of men and women and boys and girls at all levels and stages of education as a consequence of neglecting education of girls and women in the past. In 1959, National Council of Women's Education was appointed as an Advisory body with the objective of suggesting programmes and policies to the Government for the growth and expansion of girls' education. The survey report of the National Committee (1975) on the status of women found wide acceptance of common curricula for boys and girls. To increase enrollment of girls in schools, some strategies have been made. These include (a) providing regular cooked meals in Primary Schools (b) getting working children into school (c) improving the relevance of curriculum (d) empowering women for local governance (e) guaranteeing Universal Access etc. When all mankind shall receive the same opportunity of education, equality of men and women be truly realised and one can discover the road to world peace, economic stability and justice.

WOMEN AND EMPLOYMENT

Indian women are generally viewed as economic burdens, their contributions in the family are often overlooked. But today's women have come out from the four walls and are associated with the professional society for gaining economic independence where they shoulder the same responsibility as men. Though women work in every sector of economy, a large percentage is found in agriculture and allied activities (36%) followed by service sector (19.07%) and industry (12.42%)

Table : Work Participation Rate (%)

Year			Male	Female
1981	Total Population (T)	19.7	52.6	36.7
	Rural (R)	23.1	53.8	38.8
	Urban (U)	8.3	49.1	30.0
1991	T	22.3	51.60	37.50
	R	26.8	52.60	40.10
	U	9.20	48.90	30.20
2001	T	25.7	51.90	39.3
	R	31.0	52.9	42.0
	U	11.6	50.9	32.2

Source : Census of India, Govt. of India

Female work participation not only raises the family income, such economic independence also helps them to participate effectively in intrahousehold decision making. When a woman becomes an entrepreneur, she not only generates income for herself but also generates employment for other women and this multiplying effect will definitely help in poverty alleviation. Similarly a working wife is an asset both to the husband as well as to society. She not only shares financial responsibilities, she is now better equipped and more exposed to the daily going on in the world. This when imparted to the child can prove to be invaluable for his/her development.

WOMEN AND POPULATION STABILISATION

There is a definite relationship between the size of population and level of development on one hand; and between women and population control on the other. If a country crosses its limit of optimisation, large section of people would remain deprived of even the basic necessities of life. Women in this context can play a crucial role in population stabilisation. But unfortunately, in the male dominated society, women receive a subordinate position in negotiation about limiting family size, managing family resources or protecting family health. This happens only because women are deprived of education particularly in rural areas; they are financially weak and viewed by most of all as a child carrier. Educational development works as a triggering mechanism to delay marriage, a natural corollary of which is to limit the number of children. Kerala sets an example in this regard. With increasing literacy, the periphery of activities of women also expands. A wide number of job avenues are open to them, wage or income rises and this has an important bearing on fertility and contraceptive behaviour. Development of women being a key factor in achieving the goal of population control programme in India, their development through education and employment therefore requires serious consideration.

CONCLUSION

It is impossible to think about the welfare of a nation if we deny the sustained right of women. Prof. Amartya Sen points out the seven type of inequality for which burden of hardship falls disproportionately on women. These are mortality (due to gender bias in health care and nutrition), female natality (sex selective abortion and female infanticide), basic facility (education and skill development), special opportunity (higher education and professional training), employment (promotion) and ownership (home, land and property). The

terms 'gender equality', 'gender equity', 'gender empowerment' enjoyed a prominent place in the development issues after ICPD (International Conference on Population and Development) in 1994.

The ninth and tenth five year plans have laid sufficient emphasis on gender empowerment. Though India has a strong constitution proclaiming laws for equality and welfare of women, female foeticide, child marriage, dowry, molestation etc. still persist. India still has wide pockets of deep ignorance, illiteracy, obscurantism where women's status is markedly low and their participation in decision making is marginal even after almost sixty years of Independence. Until and unless these social evils are minimised, equality and empowerment of women cannot be achieved in the truest sense of the terms.

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**SCERT (WB) NEWSLETTER
ON NATIONAL POPULATION
EDUCATION PROJECT ACTIVITIES**

NATIONAL POPULATION EDUCATION PROJECT ACTIVITIES AT SCERT (WB) SINCE 2004

Since January 2004 many activities under National Population Education Project have been taken up at SCERT (WB), which is the state level implementing agency of the Project. These may be enumerated as follows :

1. DEVELOPMENT OF TRAINING MATERIALS :

SCERT (WB) organized a workshop on "Modification, adaptation and translation of NCERT document on Adolescence Education" from 29th to 31st March 2004 at its office premises. The workshop involved teachers, teacher-educators, language experts, psychiatrists, representatives from different NGOs etc. The Draft Teachers' Manual prepared at NCERT on 'Adolescence Education' was translated into Bengali with some changes. The translated document was titled 'Life-style Education' and it incorporated the views of the School Education Committee (Chairman-Prof. Ranjugopal Mukerji) on the subject.

A three-day workshop was organized by SCERT (WB) on 28-30 March 2005 for training District Resource Persons on Life-style Education. The participants presented many examples of cocurricular activities to be carried out in schools that would help disseminate the principles of Life-style Education.

2. PUBLICATION OF MATERIAL FOR TEACHER ORIENTATION :

On the basis of the outcome of the two workshops mentioned above, SCERT (WB), under the aegis of the Advisory Board on NPEP, published a Teachers' Orientation Manual on Life-style Education in Bengali. The manual focused on the basic tenets of this education, the different life-skills and their development, especially among adolescents, through cocurricular activities.

3. PUBLICITY OF MATERIALS RELATING TO INTERNATIONAL POSTER CONTEST, 2004 :

An International Poster Competition was organized jointly by NCERT and UNFPA in November 2004. The topics of the competition were 'Girl child and her future', 'A mother's promise to her child' and 'Equal rights and empowerment of women'. SCERT (WB) arranged for its advertisement in a leading daily and circulation in a number of schools in order to ensure widespread participation.

4. FORMATION OF ADVISORY BOARD :

A thirteen-member state level Advisory Board with Professor Ranjugopal Mukerji as President has been set up by School Education Department, Govt. of West Bengal, in December 2004 to monitor the implementation of the Project in the state. The Board meets from time to time to determine and approve the Plan of Action to be undertaken by SCERT with regards to NPEP. Seven meetings of the Board have taken place till date in which important decisions were taken regarding the various aspects of the Project.

5. CIRCULATION OF PUBLICITY MATERIALS FOR OBSERVING POPULATION WEEK :

In an effort to disseminate the concepts of Population Education through cocurricular activities with special emphasis on Life-style Education, SCERT (WB) planned to celebrate Population Education Week from 11-17 July 2005 in all the secondary schools and Madrasahs of West Bengal. This programme was carried out in collaboration with West Bengal Board of Secondary Education and West Bengal Board of Madrasah Education. For this purpose, booklets in Bengali and English were published by SCERT (WB) and distributed in all the educational institutions. Many schools organized activities accordingly. Some of these schools were visited by SCERT faculty.

6. CELEBRATION OF WORLD POPULATION DAY :

SCERT (WB) organised a state level seminar titled "Population Education" on 12th July 2005 to mark the World Population Day. It was inaugurated by Hon'ble MIC, School Education & Madrasah. Many eminent educationists and teachers of the state participated in the seminar.

7. PUBLICATION OF JOURNAL :

The Advisory Board on NPEP activities proposed to publish a quarterly bilingual (in English and Bengali) journal. The journal named **Pratyay** would contain erudite write-ups on the different aspects of Population Education by eminent persons in the respective fields. The NPEP Newsletter of SCERT (WB) would form a part of the journal.

OTHER IMPORTANT ACTIVITIES OF STATE COUNCIL OF EDUCATIONAL RESEARCH & TRAINING (WB) SINCE APRIL 2004

SCERT (WB) is a Post-graduate Research & Training Institute under the Department of School Education, Govt. of West Bengal, set up with the aim of carrying out training and research in different areas of school / teacher education. The major activities taken up at SCERT (WB) since April 2004 in this context are listed below:

1. PREPARATION OF PERSPECTIVE PLAN ON TEACHER EDUCATION IN WEST BENGAL :

SCERT (WB) was entrusted with the responsibility of preparing the Perspective Plan on Teacher Education in West Bengal for Xth Five Year Plan in January 2004. The Plan prepared on behalf of the state was to be submitted to the Ministry of Human Resource and Development, Government of India. A core committee was formed with a number of noted educationists in the field of Teacher Education to elaborate on the various aspects of the Plan. Two consultants were appointed to help the Director in preparing the Plan. SCERT (WB) initiated discussions with

- a) different stakeholders of teacher education in the state,
- b) A number of distinguished national experts,
- c) Renowned educationists of the state.

SCERT (WB) organized a two-day workshop on 28th and 29th June 2004 to consider the views and opinions of different stakeholders of the state as well as the scheme and data placed by them in the context of needs of teacher education as envisaged by them. The data were collected and incorporated in the draft Perspective Plan. The Plan after being examined thoroughly was submitted to the MHRD in September 2004. A team of MHRD representatives visited SCERT to gather some additional information regarding Teacher Education Institutions in the state on 5-7 January 2005. The Plan has now been appraised by MHRD.

SCERT (WB) undertook to prepare a documentary film on the Teacher Education Institutions of West Bengal. Besides, the work of writing a Status Report on the Institutions was taken up. Visits were made to different such Institutions of the state by academic and supporting staff of SCERT (WB) over the months of February and March 2005.

Apart from the actual visits made to some of these Institutes, data were collected on TEIs from all the Institutes on the basis of a questionnaire sent to them. Both the documentary and the Status Report on TEIs have been completed.

2. SSA ACTIVITIES :

a) **Publication** : A book entitled 'Shiksha Prasare Betar' was published. It contains the recommendations of the three workshops held by SCERT (WB) last year on "Formulation of guidelines and development of model scripts for educational broadcasts" with financial support from SSA.

b) **Workshops** : Three SSA project proposals were implemented. The first one was a workshop titled 'Capacity Building of School Inspectors for Academic Supervision and monitoring' held on 21-23 December 2004 at SCERT (WB). Inspectors from various districts, officials of different School Education

Boards, teachers, teacher-educators, eminent educationists etc. attended the workshop and an endeavour was made to evolve a common format for Inspection of schools throughout the state.

The second workshop was titled 'Teaching-learning & Technology-a broad overview' and it was held at SCERT (WB) on 11-12 January 2005. A large number of school teachers, teacher-educators, educationists and multimedia firms involved in the production and marketing of educational software, participated in the workshop. The products were viewed and assessed. The workshop discussed on the method of procuring the appropriate software and its distribution in different schools. The house also deliberated on the application of other educational technology in the process of teaching learning.

A third workshop was held on 23 June 2005 on 'Action Research in the context of UEE: Role of DIETs/ PTTIs' with faculty members of CTEs, DIETs and PTTIs.

c) **Education for All** : SCERT took an active part in the implementation of EFA. The Director and Research Fellows participated in the district level meeting on EFA at Jalpaiguri on 18th April 2005. SCERT (WB) organized a one-day workshop titled 'Implementation of EFA in the districts - a challenge for DIETs' on 30th April 2005 as part of EFA Week celebration.

d) **Radio Programmes** : SCERT (WB) has maintained a special relationship with All India Radio over the years. SCERT provides AIR with a schedule of radio lessons to be broadcast for classes VI to XII. The schedules are sent every three months on a regular basis.

e) **Environmental Education** : SCERT (WB) organized a one-day consultation on 'Environmental Education at School Level: Preparation of Teacher Education Institutions' on 6th June 2005 in which many teacher-educators of various levels participated. This was an effort in the direction of creating a bridge between school education and teacher education curricula.

3. ENVIRONMENTAL EDUCATION :

The Ministry of Environment & Forests, Govt. of India, supported by the World Bank has taken up the Indian Environment Management Capacity Building Project. SCERT (WB) was chosen as the state level implementing agency. The Project entailed training of 100 school teachers on hands-on experiments related to environmental concepts or GLOBE (Global Learning and Observations to Benefit the Environment). SCERT (WB) imparted the training in two phases in collaboration with Indian Environmental Society, Pashchim Banga Vigyan Mancha, West Bengal Board of Secondary Education and West Bengal Board of Madrasah Education.

One of the Research Fellows took active part in 'International GLOBE Train-the-Trainers' Workshop at Himachal Pradesh University, Shimla on 11-19 April 2005. The Director and two other Research Fellows presented a paper in a Seminar on 'Environmental Education and Creative Thinking' at Siliguri B.Ed College on 19th April 2005.

SCERT is taking an active part in the formulation of strategy for the introduction of Environmental Education in school curricula at all stages as per the directive of the Supreme Court of India. Regular meetings are being held with the officials of West Bengal Board of Secondary Education, West Bengal Council of Higher Secondary Education and Association of Boards of School Education for the purpose.

4. NATIONAL LEVEL ACHIEVEMENT SURVEY AT THE END OF UPPER PRIMARY STAGE :

The survey was undertaken by NCERT at the national level and SCERT (WB) acted as the state nodal agency. Tests were conducted on 4 subjects, viz. Bengali, Mathematics, Science and Social Science. About 6000 students from 200 schools of 4 districts took part in the test. The raw data were collected at SCERT, the data were presented as computer printout, verified manually and were finally submitted to NCERT. They are now being processed at NCERT.

5. SCERT & DIETS :

Several meetings of the Purchase and Operationalisation Committees of DIETs were held to decide the equipments to be bought, the faculty to be recruited, their qualification and other criteria and various related issues in order to make the DIETs fully functional. It has been decided that SCERT will coordinate the academic activities in the DIETs and provide essential support as and when necessary. The DIETs participate in various SCERT activities at the district level such as :

1. SCERT (WB) is at present conducting a survey in 5 blocks of Jalpaiguri district in order to assess the educational needs of SC/ST/minority children and also of children with disabilities. DIET Belakoba, Jalpaiguri, is acting as the district centre on behalf of SCERT (WB).
2. The DIETs are actively participating in training of MSK Samprasaraks. DIET, Banipur, North 24 Parganas has taken a leading role in this regard.

6. OTHER PROGRAMMES :

Besides the activities mentioned above, SCERT (WB) has taken up several Project Proposals under SSA:

1. Design and development of Mathematics Laboratory - making it compatible with the prevalent school education system.
2. Design and development of hands-on activity-based Science teaching materials and publication of manuals for Primary and Upper Primary teachers (collaboration with Paschim Banga Bijnan Mancha, Bangiya Bijnan Parishad, AISTA, AIPTA, Science Communicators' Forum, etc.)
3. Training of Shiksha Samprasaraks / Samprasarakas of MSKs in collaboration with Paschim Banga Rajya Shishu Shiksha Mission involving the DIETs.
4. To prepare a Concept Manual on Inclusive Education for Teachers and community in the context of UEE and strategies for awareness development.
5. Educational Need Assessment in Canning I (ITDP block) of South 24 Parganas.
6. Study on 'out of school girls', 'girls with low attendance' and 'girls with low levels of achievement' at Primary level.
7. Assessment of educational needs of children belonging to SC/ST/minorities and for children with disabilities in selected blocks of Jalpaiguri district.
8. 'Celebrating International Year of Physics'.
9. Use of Radio in Teaching-Learning of English Language at the Primary and Upper Primary Levels in the state of West Bengal.
10. To prepare abstracts with related information on research works (in the departments of Education, Psychology and Sociology) on School Education in Universities of West Bengal since 1980.
11. Study of data on School Education in West Bengal available from different sources.
12. Academic support to DIETs and PTTIs.
13. Tracking mainstream students admitted in Government and Government Sponsored Schools of West Bengal through the system of lottery in 1995.
14. Campaign Programme for ST girl children to create awareness of the available opportunities for self or wage employment.

